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ABSTRACT

The prevalence of adolescent drug use in Utah is compared with drug use in the United States as a whole in this study. The data were obtained from a survey of 16,000 students in grades 7 through 12. Participants were drawn randomly from 38 of Utah's 40 school districts, with school personnel administering the anonymous questionnaire during school hours. The questionnaire was designed to be comparable to questions used in similar surveys in other states. It included 97 items which featured questions on frequency and amount of drug use, problems associated with drug use, attitudes toward drug use and other deviant behavior, attachment to parents, and other concerns. The 1994 data were compared with similar data collected in Utah during 1984 and 1989, and in the United States in 1994. Results show that the proportion of Utah's adolescents who use alcohol, tobacco, and marijuana is much smaller than that in the United States. For example, 50 percent of high school seniors in the United States reported using alcohol in the past month compared to 21 percent of Utah students. However, such differences were not evident in the proportions of adolescents who use amphetamines, tranquilizers, cocaine, heroin, inhalants, and hallucinogens. Contains 24 references. Appendices present the questionnaire, correspondence, and numerical results. (RJM)

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DRUG USE AMONG UTAH STUDENTS, 1994

by

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CHAPTER 1

EXECUTIVE SUMMARY

The purpose of this study is to determine the prevalence of adolescent drug use in Utah, including a comparison with adolescents in the United States and an estimate of change since 1984. The proportion of adolescents who use alcohol, tobacco, and marijuana is much less in Utah than in the United States. However, for current use of amphetamines, tranquilizers, cocaine, heroin, inhalants, and hallucinogens, the proportion of adolescent users is not significantly different in Utah than in the United States. From 1984 to 1994 there were significant decreases in the proportion of Utah students who use alcohol, tobacco, marijuana, amphetamines, and cocaine. However, the percentage of cigarette users has increased.

These data were obtained from a survey of 16,000 students in grades 7-12. The sample was drawn randomly from classrooms in 38 of Utah's 40 school districts. School personnel administered an anonymous questionnaire during school hours. The 1994 data have been compared with similar data collected in Utah during 1984 and 1989, and in the United States in 1994.

There are two major questions about the validity of the data. First, are the results biased because absentees and dropouts were not surveyed? Second, did most students respond honestly to the questionnaire?

With regard to the first question, Johnston et al. (1993) found that their estimates of high school drug use were slightly

lower (1-4 percent) than they would have been if absentees and dropouts had been included in their survey. Since our Utah survey used sampling procedures similar to those of Johnston et al. (1993), our Utah estimates are probably slightly lower than they would have been, had absent students and dropouts been included.

Available data suggest that most students respond accurately to surveys on drug use. In earlier surveys, I found that about two percent of students say that they have taken a fictitious drug, a small percentage which has minimal effect on the overall results and indicates that purposeful overreporting is rare. Furthermore, correlations between a social desirability scale and drug use are small, which indicates that students do not underreport or overreport drug use in order to respond in a socially acceptable manner. Comparisons of self-reports with other collection methods support the validity of self reports. Overall, there is a substantial amount of evidence that the anonymous and confidential responses of high school students to questions regarding drug use are reliable and valid.

Figure 1 shows the current use of the four most commonly used drugs among Utah students in grades 7-12. During the past month, 19 percent of the students have consumed alcohol and 14 percent have used tobacco; eight percent have used marijuana, while six percent have inhaled a substance to get high.

Past month use of amphetamines, hallucinogens, and cocaine is shown in Figure 2. One in twenty of 7-12 grade students has

taken amphetamines illegally during the past month; about 4 percent have tried hallucinogen drugs. Three percent of the students have tried cocaine sometime during their lives, while two percent say they have used cocaine during the past month.

The number of alcohol users has declined significantly during the past decade, as shown in Figure 3. In 1984, the percentage of students who used alcohol during the past month was 25 percent. This declined to 22 percent in 1989 and to 19 percent in 1994.

Tobacco use decreased slightly from 1984 to 1989 but did not change significantly from 1989 to 1994. In 1984, 16 percent of 7-12 grade students used tobacco during the past month, compared to only 13.4 percent in 1989 and 13.7 percent in 1994 (See Figure 3). Cigarette use increased from 9.6 percent in 1984 to 12.4 percent in 1994.

The prevalence of marijuana use decreased substantially during the past decade. The proportion of 7-12 graders who have ever used marijuana was 22 percent in 1984, 16 percent in 1989, and only 14 percent in 1994. Current marijuana use had a substantial drop from 12 percent in 1984 to 6 percent in 1989, but then increased slightly to 8 percent in 1994 (See Figure 3).

The proportion of 7-12 grade students who have ever used amphetamines illegally decreased from 13 percent in 1984 to 10 percent in 1994. For current use of amphetamines, there was a significant drop from 6.4 percent in 1984 to 3.9 percent 1989,

and then a slight increase to 5.0 percent in 1994 (See Figure 4).

Experimentation with cocaine decreased significantly over the past decade. In 1984 the percentage of students who had ever used cocaine was 6.5 percent. In 1989 this had decreased to 4.2 percent and in 1994 it dropped further to 3.1 percent. For current cocaine use, there was a modest drop from 3.5 percent in 1984 to 1.6 percent in 1989, but no significant change between 1989 and 1994, as shown in Figure 4.

The percentage of adolescents who have used inhalants did not change significantly from 1984 to 1994. Current users went from 5.2 percent in 1984 to 5.5 percent in 1994 (See Figure 4). A detailed comparison of drug use among Utah's students from 1984 to 1994 is given in Table 1.

Use of alcohol, cigarettes, and marijuana is much lower in Utah than among comparable students in the United States (See Figure 5). Fifty percent of high school seniors in the U.S. have had alcohol during the past month compared to 21 percent of Utah students. Thirty percent of U.S. high school seniors have smoked cigarettes during the past month compared to only 13 percent of Utah seniors. For smokeless tobacco, the comparable percentages are 11 for the U.S. and 6 for Utah. Thirty-eight percent of high school seniors in the United States say they have experimented with marijuana compared to 19 percent in Utah. Nineteen percent of U.S. seniors report that they have used

marijuana during the past month compared to 9 percent among Utah seniors (See Figure 5).

For amphetamines, cocaine, and inhalants, Utah students are similar to students in the United States (See Figure 6). Sixteen percent of U.S. seniors have taken amphetamines illegally compared to 11 percent in Utah. For current use of amphetamines, the percentages are 4.0 for the U.S. and 4.7 for Utah, a difference that is not statistically significant.

Six percent of high school seniors in the United States have taken cocaine compared to 4 percent in Utah. For use during the past month, the percentages are 1.5 for U.S. seniors and 2.5 for Utah seniors, an insignificant difference.

At all grade levels, students in the U.S. are more likely to have tried inhalants than Utah adolescents. However, for current use of inhalants, U.S. and Utah adolescents are similar, as shown in Figure 6.

The national survey has included eighth and tenth grade students in recent surveys. The 1994 data show that except for alcohol, tobacco, marijuana, amphetamines, and inhalants, Utah's eighth and tenth graders are similar to eighth and tenth graders in the United States. A detailed comparison of drug use among Utah and U.S. eighth, tenth, and twelfth graders is given in Table 2.

FIGURE 1
DRUG USE 7-12 GRADE, UTAH 1994

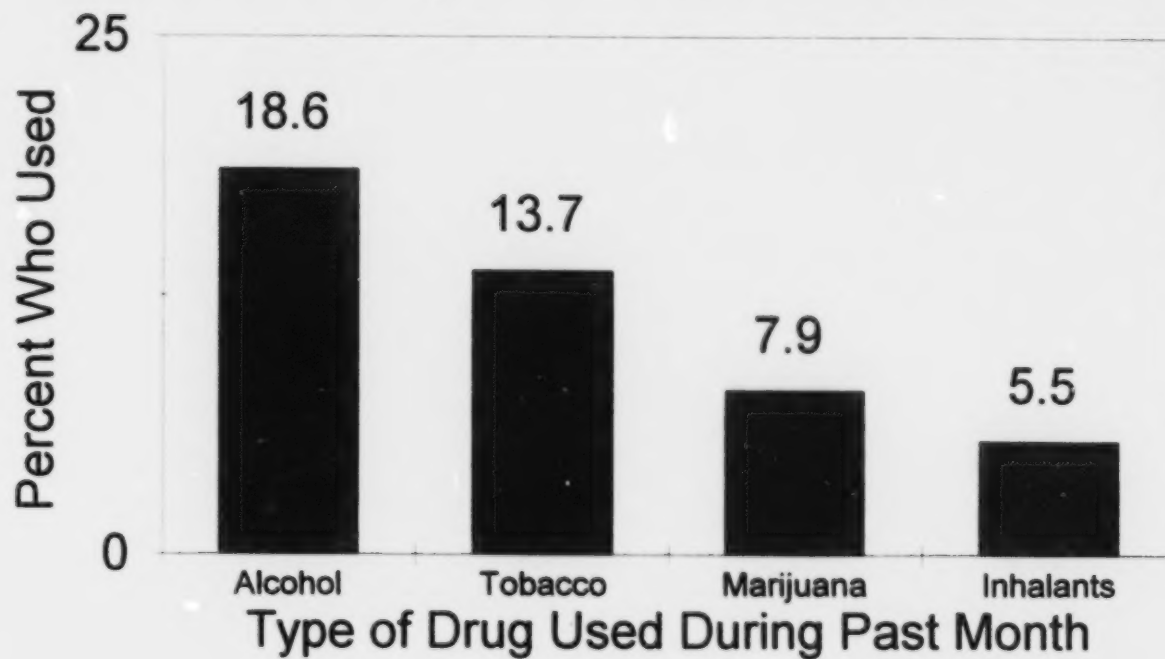


FIGURE 2

DRUG USE 7-12 GRADE, UTAH 1994

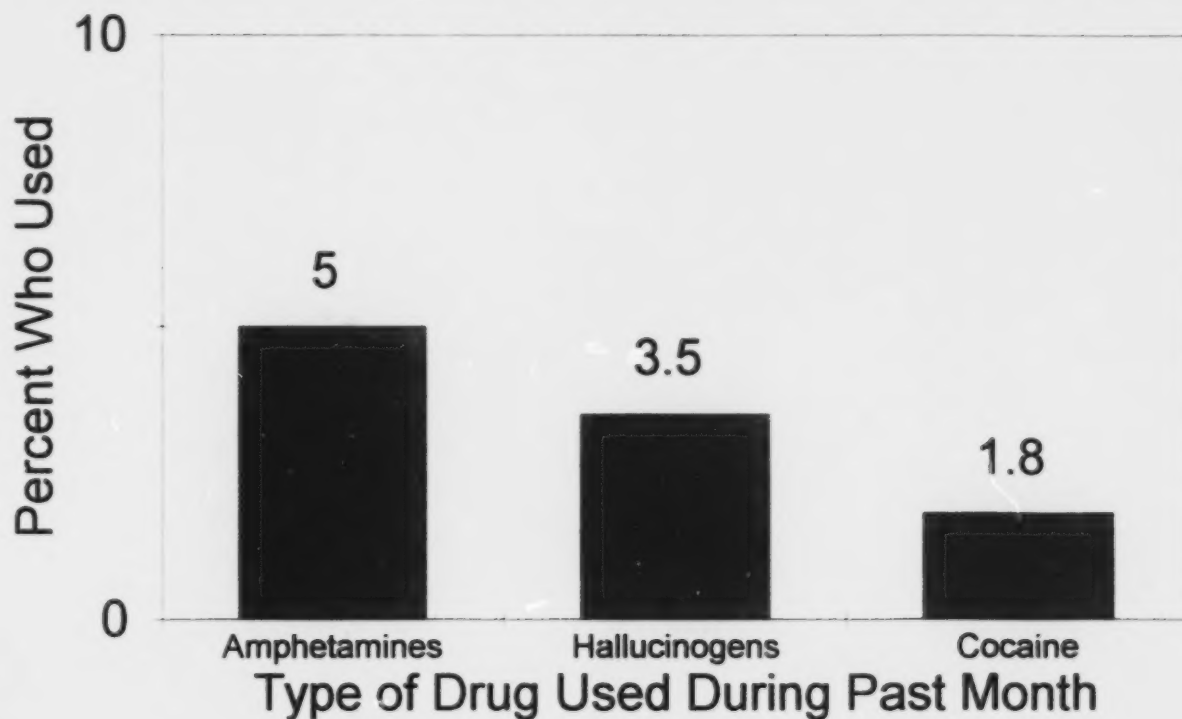


FIGURE 3

DRUG USE 7-12 GRADE: UTAH 1984-1994

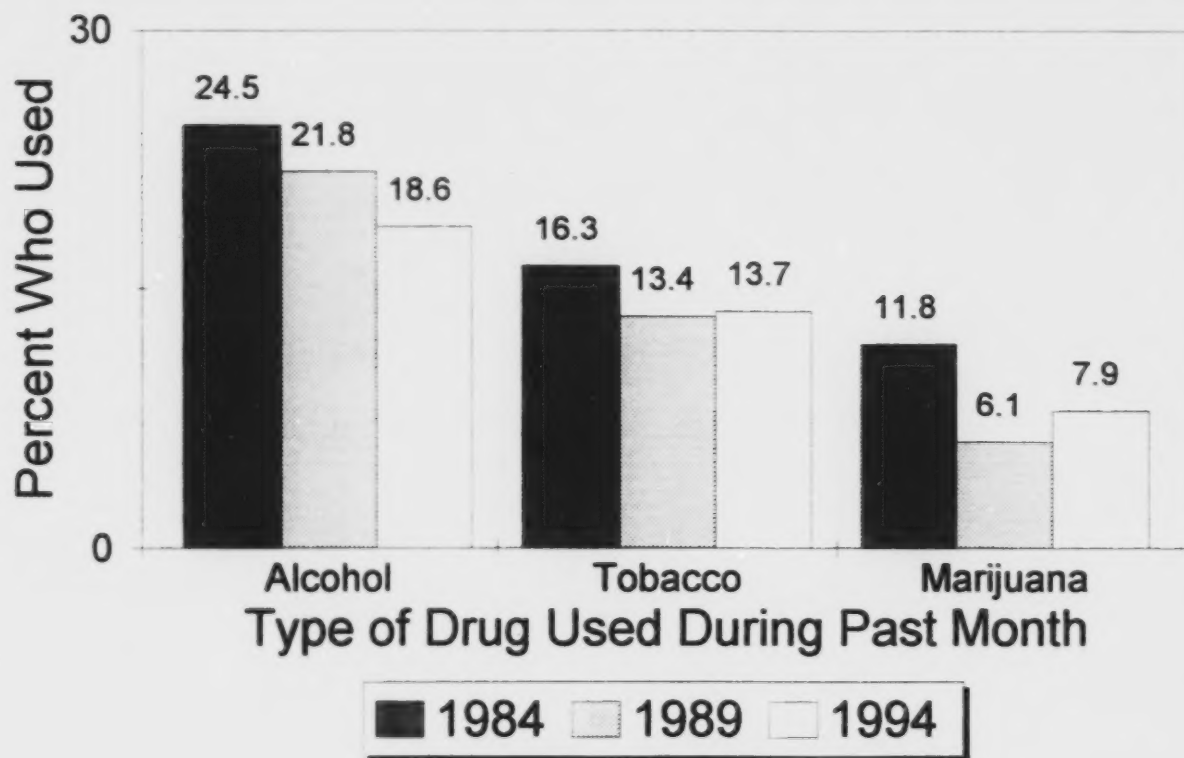


FIGURE 4

DRUG USE 7-12 GRADE: UTAH 1984-1994

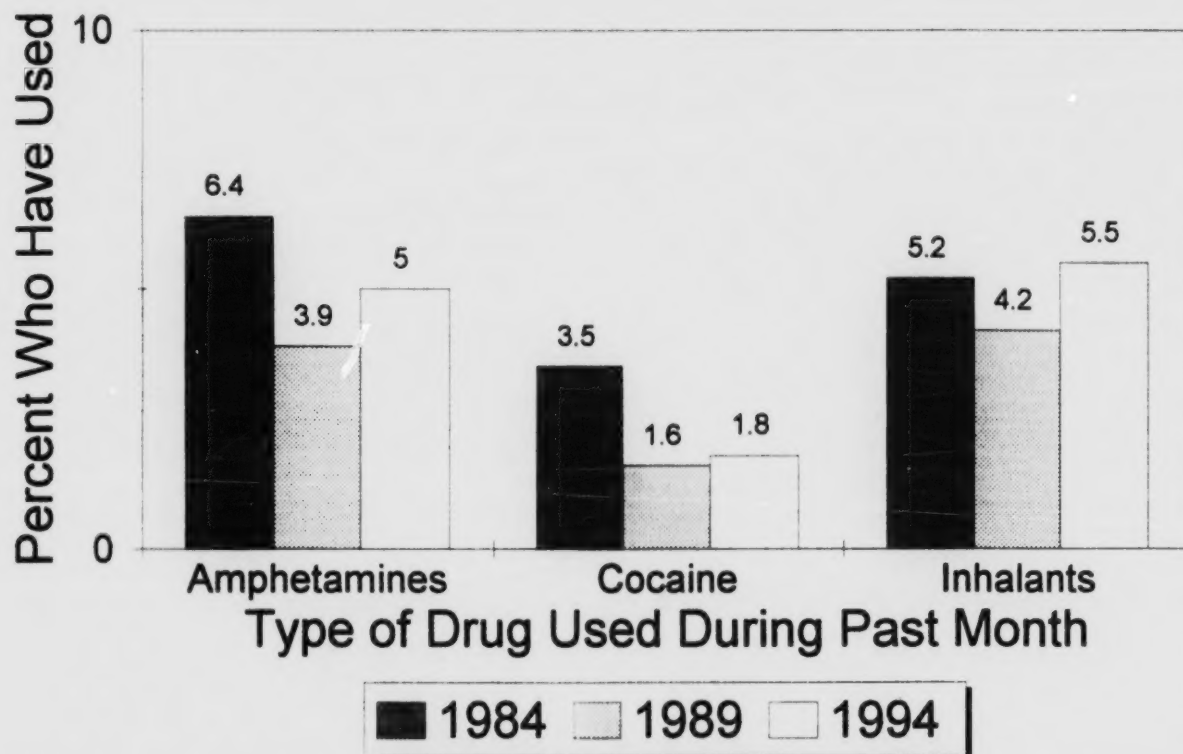


FIGURE 5

DRUG USE BY SENIORS: U.S. & UTAH, 1994

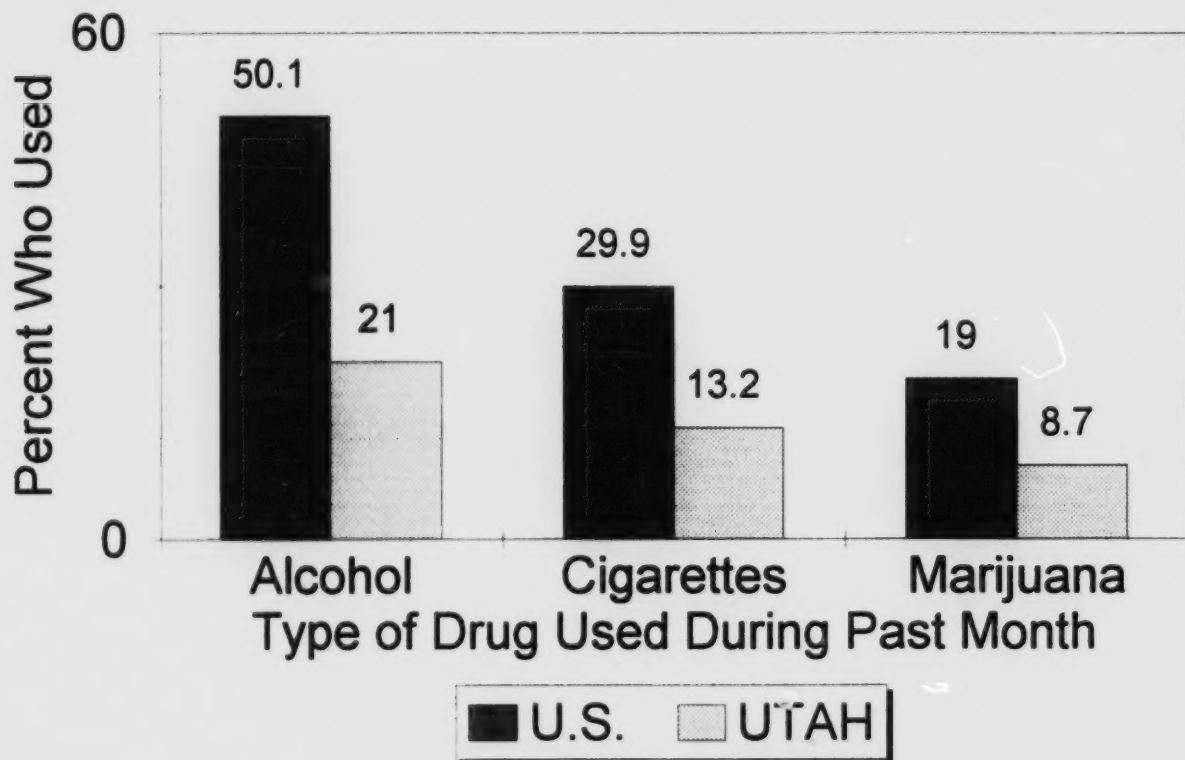


FIGURE 6

DRUG USE BY SENIORS: U.S. & UTAH, 1994

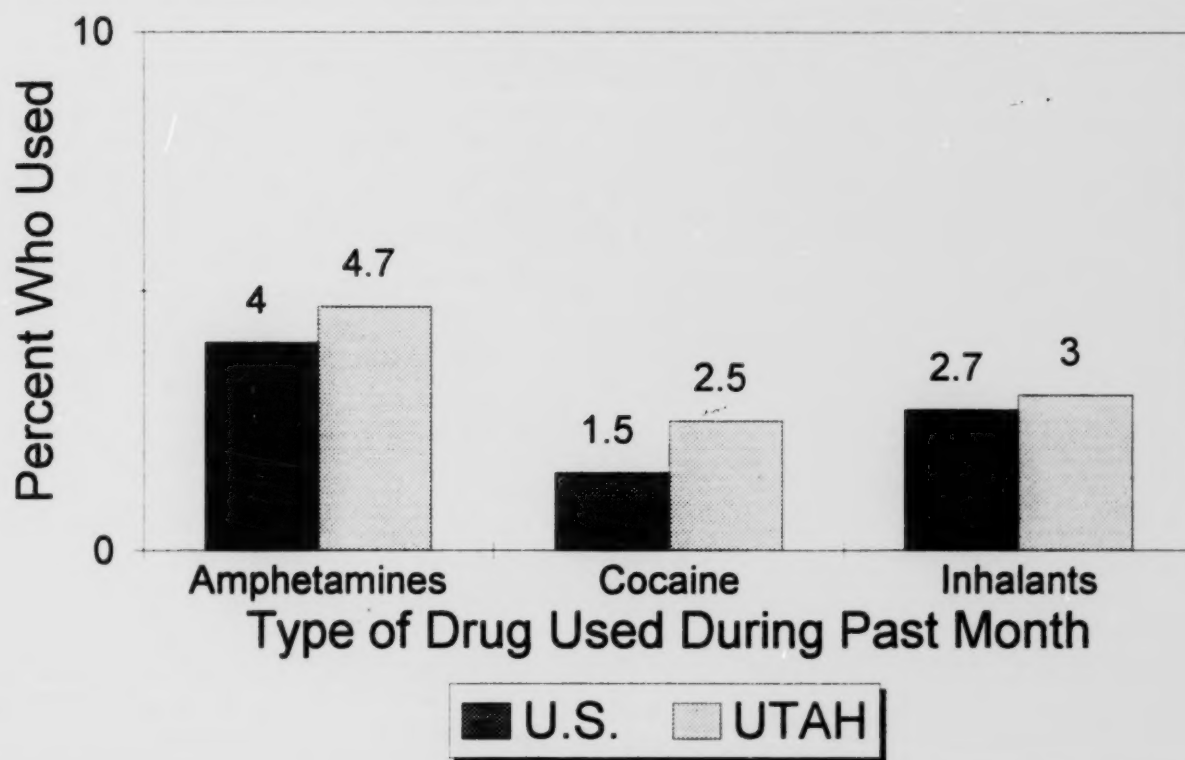


Table 1. Percent of Utah Students in Grades 7-12 Who Reported Using Various Drugs: 1984-1994

<u>Drug</u>	<u>Use</u>	<u>1984</u>	<u>1989</u>	<u>1994</u>
Alcohol	Ever	45.2	46.9	38.3*
	Month	24.5	21.8*	18.6*
Smokeless Tobacco	Ever	--	--	12.2
	Month	--	--	5.3
Cigarettes	Ever	--	--	28.8
	Month	9.6	10.5	12.4*
Any Tobacco	Ever	36.1	33.9*	30.3*
	Month	16.3	13.4*	13.7
Marijuana	Ever	21.5	16.0*	14.4
	Month	11.8	6.1*	7.9
Amphetamines	Ever	13.0	9.8*	10.3
	Month	6.4	3.9*	5.0
Barbiturates	Ever	6.5	3.9*	5.1
	Month	3.5	1.7*	2.8
Tranquilizers	Ever	7.0	4.2*	3.8
	Month	3.4	1.7	1.8
Cocaine	Ever	6.5	4.2*	3.1
	Month	3.5	1.6*	1.8
Heroin	Ever	2.1	1.0	1.7
	Month	1.7	0.5	1.0
Inhalants	Ever	12.7	11.0	12.5
	Month	5.2	4.2	5.5
Hallucinogens	Ever	7.6	6.3	6.0
	Month	4.0	2.7	3.5
Pain Medications	Ever	17.3	16.2	13.9*
	Month	9.0	8.3	7.1
Sample Size		(46,665)	(26,789)	(15,790)

*Significantly different from the percentage of the previous time period ($P < .05$)

Table 2. Percent of Students in Grades 8, 10, and 12 Who Reported Use of Various Drugs: U.S. and Utah, 1994

Drug	Use	U.S., 1994			Utah, 1994		
		8th	10th	12th	8th	10th	12th
Alcohol	Ever	55.8	71.1	80.4	33.0*	46.1*	44.8*
	Month	25.5	39.2	50.1	15.3*	21.0*	21.0*
	5 drinks ^a	14.5	23.6	28.2	6.1*	9.5*	9.3*
Smokeless Tobacco ^b	Ever	18.7	28.1	31.0	9.0*	14.8*	13.9*
	Month	6.6	10.4	10.7	4.0*	6.1*	5.8*
Cigarettes ^b	Ever	45.3	56.3	61.9	24.0*	34.2*	33.8*
	Month	16.7	24.7	29.9	11.4*	14.0*	13.2*
Marijuana	Ever	16.7	30.4	38.2	10.4*	18.8*	18.9*
	Month	7.8	15.8	19.0	6.8	9.4*	8.7*
Amphetamines	Ever	12.3	15.1	15.7	8.8*	13.1	11.2*
	Month	3.6	4.5	4.0	4.3	5.8	4.7
Barbiturates	Ever	-.-	-.-	7.0	4.5	5.7	5.3
	Month	-.-	-.-	1.7	2.4	3.1	2.3
Tranquilizers	Ever	4.6	5.4	6.6	3.3	3.7	4.3*
	Month	1.1	1.5	1.4	1.4	1.6	2.0
Cocaine	Ever	3.6	4.3	5.9	2.2	3.2	3.9*
	Month	1.0	1.2	1.5	1.2	1.8	2.5
Heroin	Ever	2.0	1.5	1.2	1.8	2.0	2.2
	Month	0.6	0.4	0.3	1.0	0.9	1.1
Inhalants	Ever	19.9	18.0	17.7	14.3*	14.7*	9.2*
	Month	5.6	3.6	2.7	7.4	5.3	3.0
Hallucinogens	Ever	4.3	8.1	11.4	4.3	6.6	7.8*
	Month	1.3	2.4	3.1	2.8	3.8	3.8
Sample Size		17300	15800	15400	2696	2609	2519

*Utah sample significantly different from U.S. sample ($p < .05$).

^aHad 5 or more drinks in a row within the past 2 weeks.

^bU.S. smokeless tobacco and cigarette data are from 1993, as 1994 data were not available.

CHAPTER 2

RESEARCH METHODOLOGY

Development of Questionnaire

A questionnaire was designed for administration to students in the classroom. Input was received from a variety of professionals involved in drug research, prevention, and treatment, including educational administrators, school counselors, parents, narcotics officers, drug counselors, and students. The questions were designed to be comparable to questions used in similar surveys being conducted in Kansas, Maine, Oregon, South Carolina, and Washington. In addition, the questions were similar to items used in a national survey conducted annually by the National Institute on Drug Abuse (O'Malley et al., 1994).

The questionnaire included 97 items in the following major areas: (1) frequency and amount of drug use, (2) problems associated with drug use, (3) attitudes toward drug use and other deviant behavior, (4) attachment to parents, (5) attitudes toward school, (6) amount of change during past year, (7) drug use of friends, and (8) attachment to neighborhood. The questionnaire went through several drafts and is similar to the questionnaire used in previous surveys conducted in Utah. A copy of the questionnaire is in Appendix I.

Administration of Questionnaire

A letter from the Utah State Office of Education was sent to the superintendent of each of the 40 school districts to

explain the purpose of the survey and encourage their participation. A copy of the letter is shown in Appendix II. Thirty-nine of the 40 school districts in Utah agreed to participate. Morgan School District did not participate because of concern that some parents might object to such a survey.

Each participating school district was contacted to describe the sampling plan and identify contact persons in each school. Each school was contacted to describe the survey, encourage their cooperation, and plan the administration of the questionnaires.

Packets with questionnaires and computer answer sheets were mailed or delivered to the contact person of each school. Each packet had an instruction sheet, questionnaires, computer answer sheets, and a return envelope. The contact person gave one packet to each participating teacher, and the teacher read the instructions to the students and administered the survey. The instructions stated that participation was voluntary and that responses would be anonymous. Copies of the instructions to contact persons and teachers are in Appendix III.

The survey was administered in April and May of 1994. When the survey was completed, the teacher placed the answer sheets in a return envelope and mailed them to me. In some cases research workers traveled to the schools and picked up the completed surveys. The answer sheets were sorted and an optical scanner was used to transfer the information to a computer disk.

Sample

Drawing the Sample

The purpose of the survey was to obtain representative responses from the 212,834 students in grades 7-12. Based on the enrollment figures in the Fall Enrollment Report (Utah State Office of Education, 1993), I calculated the total number of classrooms within each grade level of each planning district. Next, I determined the number of classrooms that needed to be sampled from each planning district in order to obtain the desired level of precision. A statistician was consulted to help formulate the sampling plan and insure that the desired precision was obtained within each grade level of each planning district. Data from the 1989 Utah school survey were used to estimate the amount of variance for selected questions.

Each classroom was given a unique number and a table of random numbers was used to identify which classrooms were to be sampled from each grade level of each planning district. Then we contacted the schools that had classrooms in the sample and worked with them to conduct the survey.

An illustration may help clarify the selection of the sample. If our procedures identified 2 classrooms each in grades 10-12 of a given high school, we worked with the school contact person to select those classes. Usually, the contact person gave us a list of all classes at a given grade level or all sections of a required class at a given grade level. For

example, if there were 6 sections of required senior English, we used a table of random numbers to select 2 of those sections.

In a few schools, a random sample of sections from a given hour were chosen. In some schools the contact person selected the classes, although this was done only after we explained the nature and importance of random selection to the contact persons and they insured us that selection would be random and representative of that grade level.

Sample Bias

A total of 760 classrooms were selected using this procedure. Eight-six percent of those classrooms (653) completed the surveys and returned the answer sheets. In all cases of non-participation, the teacher or principal indicated that they did not have time to administer the surveys because it was too late in the academic year. Since the non-participation occurred across different districts and was due to time pressure and rather than location or student characteristics, it is doubtful that the non-participation produced systematic bias.

Table 3 gives the number of classes chosen within each planning district and the final number that actually participated in the survey. The highest participation rate was 100 percent in the Wasatch planning district and the lowest participation rate was 74 percent in the San Juan planning district. As mentioned earlier, the total participation rate for the entire state was 86 percent of the sampled classes.

Table 3. Number of Classrooms Planned and Actually Sampled from Each Planning District

<u>Planning District</u>	<u>Final Sample</u>	<u>Planned Sample</u>	<u>Return Rate</u>
Bear River	48	50	96
Weber	51	54	94
Salt Lake	100	122	82
Davis	41	55	75
Tooele	30	37	81
Wasatch	23	23	100
Utah	106	136	78
Summit	39	40	98
Central	33	41	80
Southwest	104	109	95
Uintah	34	37	92
Four Corners	27	33	82
San Juan	17	23	74
TOTAL STATE	653	760	86

There are three planning districts where non-participation may have introduced some bias in the sample. First, as indicated earlier, Morgan School District did not participate. In the original sampling plan, five classrooms were to be chosen from Morgan School District. To compensate for this omission, 5 additional classrooms were randomly chosen from Ogden and Weber school districts. Since Morgan District comprises only 5 percent of the population in Weber Planning District, this omission will have a relatively small effect on the overall results of the Weber Planning District.

Second, in Salt Lake School District only 8 of the 23 classrooms in the sample actually participated. The eight classes were all from one high school and no seventh and eighth grade students were sampled. Because of this omission, the results from the Salt Lake Planning District should be considered tentative. Nevertheless, our sampling unit was the planning district and not the school district, and for the entire planning district the sample appears to be adequate. As shown in Table 3, a total of 100 of 122 classrooms (82%) were sampled in the Salt Lake Planning District. Furthermore, since Salt Lake School District is only 12 percent of the total students in the Salt Lake Planning District, it is doubtful that the final results would be substantially different even if all of the selected classrooms in Salt Lake School District had participated in the survey.

The third bias occurred in Utah County where only 9 of 24 classrooms from Provo School District participated in the survey. However, the bias produced by this omission may be minimal because (1) previous surveys indicated that there were relatively small differences between Provo and Nebo School districts in drug use, and (2) Provo School District is the smallest of the three districts in Utah County and comprises only 18 percent of the population in the county.

Tintic School District originally agreed to participate in the survey but was not able to because of time constraints. However, this did not affect the sample because Tintic district includes only 124 students, which is only 1.5 percent of the Central Planning District and less than .06 percent of the state population.

The questionnaire was administered to all students in attendance on the day of the survey. A total of 16,336 students in grades 7-12 completed the survey. The sample size was reduced by eliminating those with illogical responses. First, we eliminated 288 (1.8 percent) who said they had never used a given drug but then reported use of that particular drug during the past 30 days. Second, we eliminated 85 students who reported that they had taken all 9 illegal drugs during the past 30 days (marijuana, amphetamines, barbiturates, tranquilizers, pain medications, cocaine, heroin, inhalants, hallucinogens). The final usable sample was 15,963 students in grades 7-12.

There was a small amount of nonresponse to questions on drug use, ranging from 0.7 percent for tobacco to 1.2 percent for hallucinogens. Nonresponse to items on drug use were similar to nonresponse to the other types of items. For example, the nonresponse rate to questions on grade level, gender, and ethnicity were 0.7 percent, 1.1 percent, and 1.6 percent, respectively.

Three school districts requested that we eliminate selected items that they felt were inappropriate to ask on a student questionnaire. Millard School District asked us to eliminate all items on risk factors (questions 43-97), Weber School District had us eliminate 20 items, and Granite School District requested that we eliminate 10 items. To accommodate these requests, we printed separate versions of the questionnaire for these three school districts. As a result, on some of the items designed to measure risk factors, the sample size is reduced by about 2,200 cases. However, all three of these districts included all items which measured drug use.

The Bear River planning district includes Box Elder, Cache, Logan, and Rich school districts. In the random drawing of classrooms within this planning district, none of the classes from Rich School District were chosen. This was simply the result of the random sampling process and occurred because Rich district is less than 2 percent of the students in the Bear River planning district.

The sample appears to be representative of the total Utah school population in grades seven through twelve. Random sampling procedures were used to sample the classrooms, 38 of the 40 school districts in Utah participated, and the response rate among the sampled classes was 86 percent.

Table 4 gives a demographic comparison of the sample with the total Utah school population. There is a slight overrepresentation of females and a slight underrepresentation of seniors and whites. However, these differences are small and within expectations, given the type of sample used.

Since the sampling units were grade levels within 13 planning districts, the sample is a random, stratified sample. Technically, 78 different random samples were drawn, six grade levels within 13 planning districts. Within each planning district, we sampled sufficient cases to give us the required error rate. Some planning districts with relatively small populations required a sample that was larger than their proportion of the state population. As a result, the demographics of the final sample is somewhat different from the demographics of the total Utah school population. Nevertheless, the students surveyed are similar to the Utah student population in gender, race, and grade, as shown in Table 4.

Table 4. Comparison of Sample with Utah School Population in Grades 7-12, 1994 (In Percent)

		<u>Population</u>	<u>Sample</u>
Gender	Female	48.5	51.2
	Male	51.5	48.8
Ethnic Status	African-American	0.5	1.1
	Asian	1.5	1.3
	Latino	4.0	3.3
	Native American	1.2	4.7
	Pacific Islander	0.5	0.9
	White	92.3	83.2
	Other	--.-	5.5
Grade	7	17.6	19.8
	8	17.9	17.8
	9	17.5	14.9
	10	15.9	16.5
	11	16.2	16.1
	12	14.9	14.8

Individuals who regularly use drugs are more likely to be absent and dropout of school. Their omission from the sample may cause estimates of student drug use to be low. Johnston et al. (1988) studied how absenteeism was related to drug use, and found that their estimates averaged 1.4 percent lower than they would have been had the absent students been included in their sample. Since the Utah survey used sampling procedures similar to those of Johnson et al. (1988), it is reasonable to assume that Utah estimates are slightly lower than they would have been had absent students been included.

Johnston et al. (1988) extrapolated from household surveys to estimate how high school dropouts affected their findings. They found that their estimates of high school drug use would have been slightly higher had dropouts been included in their survey. Johnston et al. (1988) concluded that school surveys provide valid approximations of actual prevalence rates, even though they tend to underestimate slightly actual rates of drug use among high school students.

Validity

Whenever I conduct surveys of this type, I get a call or note from a few teachers who do not feel that the survey is valid. They have heard students joke about filling out the survey and suspect that many did not take it seriously and that some purposely filled it out inaccurately. Our analysis suggests that there are a small percentage of students who have

not taken the survey seriously. However, this group appears to be a small minority who do not invalidate the overall results.

Can valid information on student drug use be obtained from a questionnaire? To encourage students to be truthful, the survey was voluntary and anonymous. I now review some of the available evidence that suggests that most students answered truthfully and accurately:

(1) In previous surveys in 1984 and 1989, I included a fictitious drug. Two percent of the students checked that they had taken this nonexistent drug. Tabulations were computed with and without those who reported having taken the non-existent drug. Differences between the two tabulations were small, one percent or less for most comparisons. This indicates that purposeful overreporting had only a small effect on the results.

(2) In the earlier surveys, I included the Marlowe-Crowne social desirability scale along with items on drug use. This scale is designed to identify students who respond in a socially acceptable manner, whether it be overreporting or underreporting to be accepted by their peers. Correlations between social desirability and drug use were small. This indicates that students did not underreport or overreport drug use in order to respond in a socially acceptable manner.

(3) Reporting inconsistency was infrequent and had only a small effect on the overall results. As noted earlier, a total of 1.8 percent of the students reported on one question that they have never used a particular drug and then on the next

question responded that they had used that drug during the past 30 days. An additional 85 (0.5%) students reported that they have taken 9 illegal drug within the past 30 days, which seems unlikely. This is a total of 2.3 percent of the students who responded inconsistently or illogically on the questionnaire. These figures indicate that only a small percentage of the students were careless or purposely reported incorrect answers. Usage rates computed after omitting inconsistent respondents were similar to but slightly less than those obtained for the entire sample. The inconsistent respondents were omitted for all tabulations. By eliminating the inconsistent respondents, we minimized any bias that may result from careless and untruthful students.

(4) In a previous survey, I collected test-retest data on 106 senior high school students in central Utah. Twelve items on drug use were included in two different questionnaires which were administered one week apart. Ninety-five percent of the responses at time two were identical to those at time one. This suggests that high school students are able to respond consistently over time to drug-use questions.

(5) Prevalence rates obtained from different sampling and collection methods are similar (Johnston et al., 1988; Needle et al.; Whitehead and Smart, 1972). Several scholars have compared self-reports with other collection methods and have found evidence for the validity of self-reports of drug use (Bauman et al., 1982; Bonito et al., 1976; Smart, 1975; Smart and Blair,

1978; Smart and Jarvis, 1981; Stacy et al., 1985; Whitehead and Smart, 1972). The consistency of results in different regions and using different methods suggests that the results are reasonably valid (Needle et al., 1983; O'Malley et al., 1983).

Overreporting has been shown to be minimal and students who responded inconsistently were eliminated from the sample. Since regular drug users are more likely than other students to be absent or drop out of school, as noted earlier, the estimates of adolescent drug use reported here are probably slightly lower than actual usage rates. Nevertheless, they provide a reasonable estimate of adolescent drug use. Since the same methodology was used in the Utah surveys conducted in 1984, 1989, and 1994, the biases should be constant across the decade and allow us to make valid comparisons over time.

Weighting

As explained earlier in the sampling section, the number of students surveyed from each planning district is not proportional to their number in the total Utah school population. Therefore, procedures were developed to weight each school district according to its percent of the total school population.

Three steps were used in creating sampling weights. First, I determined what percent each school district was of the total school population. This was obtained from the 1993 Fall Enrollment Report of Utah Public and Private Schools (Utah State Office of Education, 1993). The second step was to determine

what percent each district was of the total sample. Third, the first percentage was divided by the second percentage to obtain a sampling weight for each school district. The weights are shown in Table 5. Districts that were undersampled received weights greater than 1.00, while districts that were oversampled received weights less than 1.00.

The weighting adjusts sample sizes so that they are proportional to the actual school district populations. The weights were used in all state computations to insure that the results are representative of the state.

Since sampling was done by planning district, no weighting was necessary when performing computations within individual planning districts. However, weighting was necessary to compensate for undersampling in the Salt Lake and Provo School districts. In addition, Alpine, Nebo, Provo, and Washington school districts were oversampled at request of the school districts. Therefore, for analyses within Salt Lake, Utah, and Southwest planning districts, weighting was used to compensate for this oversampling.

For each of these three planning districts I computed two percentages: (1) The ratio of each school district population to the total population within the planning district. (2) The ratio of each school district's sample to the total sample within the planning district. The weighting for these planning districts are shown in Table 6.

Table 5. Sampling Weights for 1994 School Survey

<u>Planning District</u>	<u>School District</u>	<u>Percent of State*</u>	<u>Percent of Sample</u>	<u>Sampling Weight</u>
Bear River	Box Elder	2.4	2.8	.88
	Cache	2.9	3.9	.74
	Logan	1.2	1.7	.69
Weber	Ogden	2.6	2.7	.97
	Weber	6.3	5.4	1.16
Salt Lake	Granite	17.1	6.7	2.55
	Jordan	14.8	6.6	2.25
	Murray	1.5	1.5	.97
	Salt Lake	4.8	1.3	3.67
Davis	Davis	12.2	6.6	1.85
Tooele	Tooele	1.6	4.4	.36
Wasatch	Wasatch	0.7	3.4	.21
Utah	Alpine	9.2	10.0	.91
	Nebo	3.9	5.5	.70
	Provo	2.9	1.4	2.07
	North Summit	0.2	1.6	.15
Summit	Park City	0.5	1.7	.31
	South Summit	0.3	1.5	.18
Central	Juab	0.4	0.4	1.00
	Millard	0.9	1.8	.46
	North Sanpete	0.6	0.3	1.83
	Piute	0.1	0.1	1.05
	Sevier	1.2	0.9	1.30
	South Sanpete	0.7	0.9	.76
	Wayne	0.1	0.3	.47
	Beaver	0.3	1.1	.30
	Garfield	0.3	0.7	.36
Southwest	Iron	1.3	2.1	.62
	Kane	0.3	0.4	.78
	Washington	3.4	11.5	.30
	Daggett	0.04	0.4	.10
	Duchesne	1.0	2.5	.41
Uintah	Uintah	1.4	2.4	.56
	Carbon	1.2	1.6	.74
	Emery	0.8	1.1	.72
Four Corners	Grand	0.3	0.5	.68
	San Juan	0.8	2.4	.31

*Adjusted to compensate for the omission of Morgan, Rich, and Tintic school districts.

Table 6. Sampling Weights for Analysis of Salt Lake, Utah, and Southwest Planning Districts

<u>Planning District</u>	<u>School District</u>	<u>Percent of Planning District Population</u>	<u>Percent of Planning District Sample</u>	<u>Planning District Sampling Weight</u>
Salt Lake	Granite	44.8	41.5	1.08
	Jordan	38.9	41.2	.94
	Murray	3.8	9.4	.40
	Salt Lake	12.5	7.9	1.58
Utah	Alpine	57.5	59.1	.97
	Nebo	24.3	32.4	.75
	Provo	18.2	8.4	2.17
Southwest	Beaver	5.8	7.0	.83
	Garfield	4.5	4.1	1.09
	Iron	23.1	13.6	1.70
	Kane	5.6	2.6	2.17
	Washington	61.0	72.7	.84

Due to nonresponse, the proportion of seventh and eighth grade students was higher in the Utah, Central, and San Juan planning districts than in the other 10 planning districts. This could bias comparisons among planning districts where 7-12 grade students are examined as a whole. Therefore, for this type of comparison Utah, Central, and San Juan districts were weighted to compensate for the oversampling of seventh and eighth graders.

Statistical Significance

Two types of statistical significance tests are used in this report. First, confidence intervals are constructed for each percentage. This enables use to determine the precision of each percentage. Second, a difference of proportions test is used to compare two percentages. This allows us to determine if two percentages are significantly different in size.

For statistical tests we have reduced the sample size by one-half to account for the greater sampling variance in cluster samples than in simple random samples. This assumes that our sample has the same precision as a simple random sample of one-half the size.

Confidence intervals enable us to determine the degree of sampling error in estimates of drug use. The precision of confidence intervals depends on the size of the sample as well as the size of the percentage. Precision increases as sample size increases and as a percentage moves away from 50.

For the total sample of 15,963 students in grades 7-12, 95 percent confidence intervals vary from ± 0.4 percent to ± 1.5 percent, depending on the size of the percentage. For all comparisons the confidence interval is less than ± 1.5 percent. This means that had we surveyed all of the students in the state of Utah, the results would be within ± 1.5 percentage points of our present findings for all drugs at least 95 times out of 100.

For comparisons among subgroups the precision drops somewhat because the sample sizes are smaller. When grades 7-8, 9-10, and 11-12 are compared, the confidence intervals vary from ± 0.5 to ± 2.2 . When single grades are compared, the confidence intervals vary from ± 0.8 to ± 3.0 , depending on the size of the percentages. For comparisons by planning district, 95 percent confidence intervals vary from ± 1.0 percent to ± 3.7 percent. Thus, we can be confident that within a particular grade level and planning district, student drug use in Utah is within four percentage points of the estimate reported.

CHAPTER 3

UNITED STATES AND UTAH COMPARISONS

Alcohol, tobacco, and marijuana are used much less frequently by adolescents in Utah than by adolescents in the United States. Utah adolescents are somewhat less likely to have reported ever using amphetamines or inhalants. Differences between Utah and U.S. adolescents in the use of barbiturates, tranquilizers, cocaine, heroin, and hallucinogens are small and most of the differences are not statistically significant.

In comparing grade levels, most of the differences are considerably greater for seniors than for eighth or tenth graders. Except for alcohol, tobacco, and marijuana, eighth graders in Utah are similar to eighth graders in the United States.

The national data were obtained from the 1994 survey of students in grades 8, 10 and 12 which is conducted by the University of Michigan for the National Institute on Drug Abuse (Johnston et al., 1994). Data collection took place in approximately 135 public and private high schools selected to provide an accurate cross-section of students throughout the United States. About 16,000 students were surveyed from each grade level and their procedures and questionnaires were similar to those used in our Utah survey. I turn now to a detailed comparison of the Utah and national data.

Alcohol

Eighty percent of high school seniors in the United States have tried alcohol sometime in their lives, compared to 45 percent of Utah seniors. The comparable percentages are 56 and 33 percent for U.S. and Utah eighth graders, respectively.

Fifty percent of U.S. seniors have consumed alcohol within the past month, compared to 21 percent among seniors in Utah. Among tenth graders, the comparable percentages are 39 for the U.S. and 21 for Utah. Twenty-six percent of eighth graders in the United States have consumed alcohol within the past month, compared to 15 percent of eighth graders in Utah.

At all grade levels the proportion of adolescents who use alcohol is much lower in Utah than in the United States. However, this difference is greatest among seniors and smallest among eighth graders; among seniors the difference is 29 percent and it decreases to only ten percent among eighth graders, as shown in Figure 7.

As a measure of alcohol abuse, students were asked how many times during the past two weeks that they had five or more drinks in a row. Twenty-eight percent of U.S. seniors reported that they had done this at least once during the past two weeks, compared to only 9 percent of Utah seniors. Among tenth graders, the percentages are 24 for the U.S. and 10 for Utah, while for eighth graders the percentages are 15 in the U.S. and 6 in Utah (See Figure 8).

FIGURE 7

PAST MONTH ALCOHOL USE, 1994

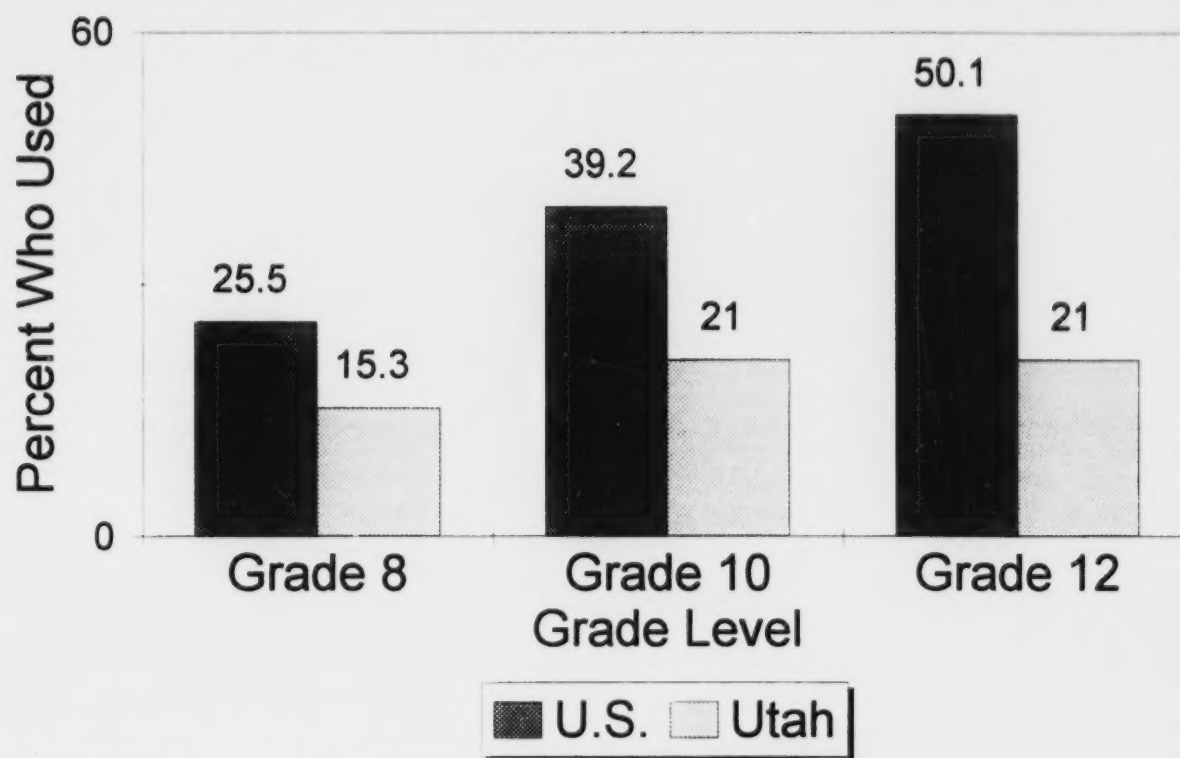
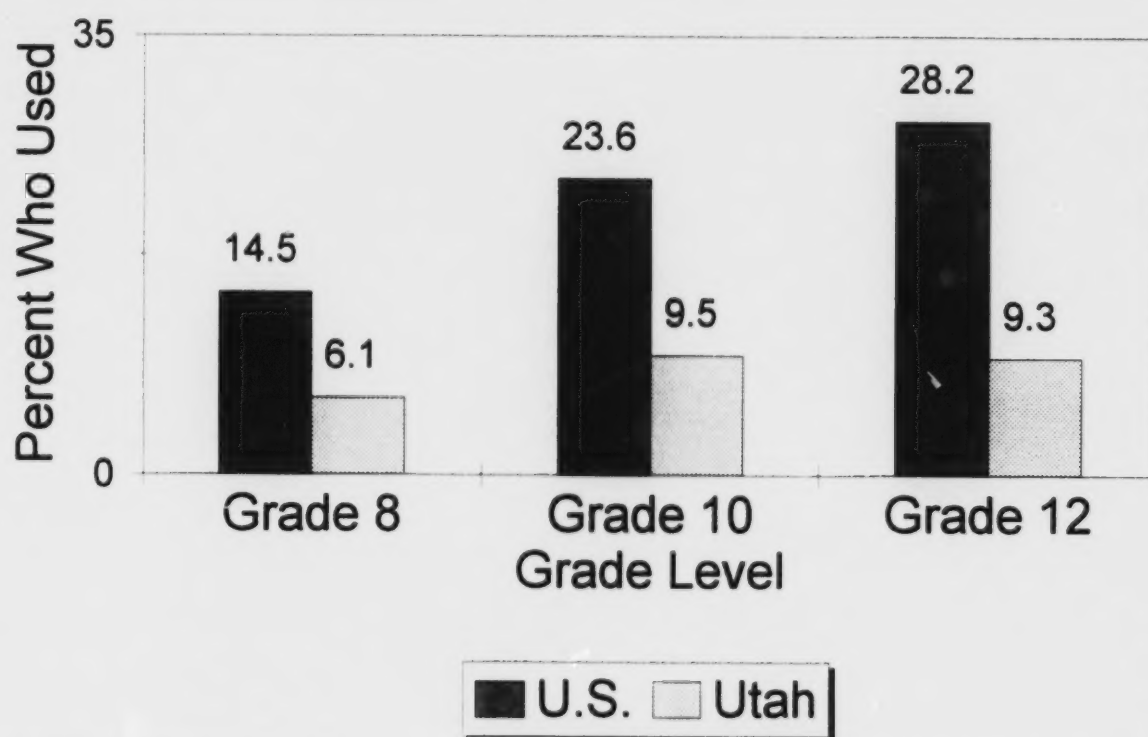


FIGURE 8

FIVE DRINKS IN ROW, PAST 2 WEEKS, 1994



Tobacco

Thirty-one percent of high school seniors in the United States report that they have tried smokeless tobacco sometime in their lives, compared to 14 percent of Utah seniors. Among tenth graders, the percentages are similar to those of seniors, 28 percent in the U.S. and 15 percent in Utah. Smokeless tobacco has been tried by 19 and 9 percent of U.S. and Utah eighth graders, respectively.

Comparisons of current smokeless tobacco use are given in Figure 9. Eleven percent of seniors in the U.S. have used smokeless tobacco during the past month compared to 6 percent of seniors in Utah. Among tenth graders the percentages are almost the same as for twelfth graders, 10 percent in the U.S. and 6 percent in Utah. The proportion of smokeless tobacco users among eighth graders is 7 percent in the U.S. and 4 percent in Utah (See Figure 9).

Sixty-two percent of high school seniors in the U.S. have smoked cigarettes sometime in their lives, compared to 34 percent in Utah. Among U.S. eighth graders, 45 percent have tried cigarettes, compared to 24 percent of Utah eighth graders.

Current use of cigarettes is shown in Figure 10. Thirty percent of seniors in the United States have smoked cigarettes during the past month, compared to 13 percent among Utah seniors. As with alcohol, differences between the U.S. and Utah are much less among eighth graders than among tenth and twelfth graders (See Figure 10).

FIGURE 9

PAST MONTH SMOKELESS TOBACCO, 1994

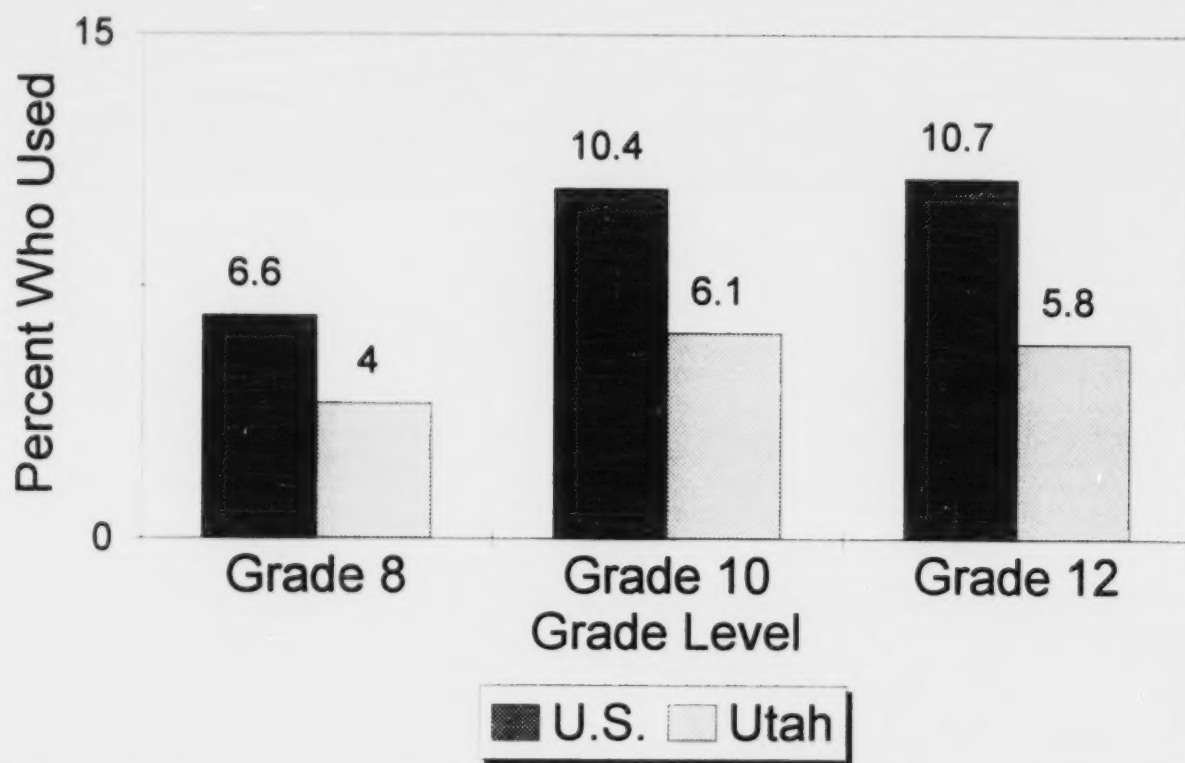
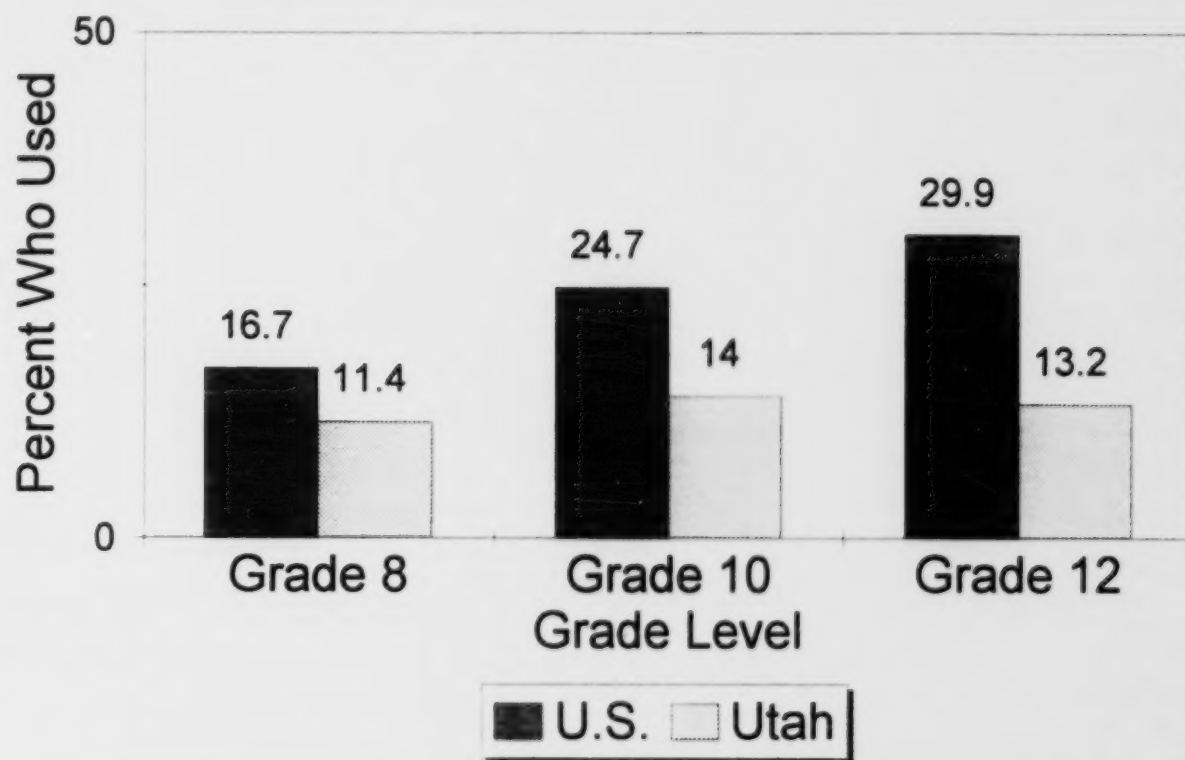


FIGURE 10

PAST MONTH CIGARETTE USE, 1994



Marijuana

Thirty-eight percent of seniors in the United States have experimented with marijuana compared to 19 percent of seniors in Utah. Among both tenth and eighth graders the proportion of students who have used marijuana is less in Utah than in the United States. Again, the difference between the two groups is much less among eighth graders than among twelfth graders, as shown in Figure 11.

The percent of seniors who have used marijuana during the past month is 19 in the United States and 9 in Utah (See Figure 12). Among tenth graders, the comparable percentages are 16 for the U.S. and 9 for Utah. There is only a one percent difference between U.S. and Utah eighth graders, as shown in Figure 12.

Stimulant and Depressant Drugs

For amphetamines, the differences between the nation and Utah are relatively small. At all three grade levels, Utah students are less likely than U.S. students to have ever used amphetamines illegally, but the differences are not large (See Figure 13). For current use of amphetamines none of the differences between Utah and U.S. students are statistically significant, as shown in Figure 14.

For illegal use of barbiturates and tranquilizers, all Utah and U.S. differences are small; the only significant difference is for seniors' lifetime use of tranquilizers, which is 6.6 percent in the U.S. and 4.3 percent in Utah (See Table 2).

FIGURE 11

EVER USED MARIJUANA, 1994

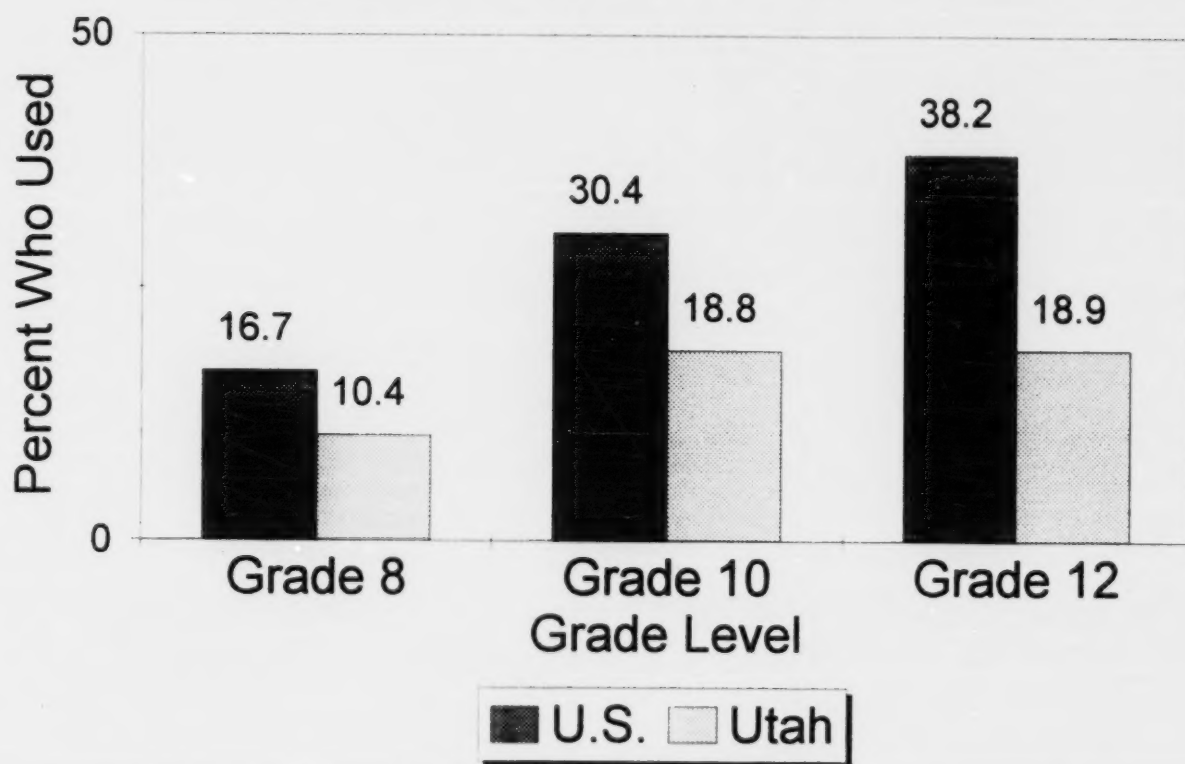


FIGURE 12

PAST MONTH MARIJUANA USE, 1994

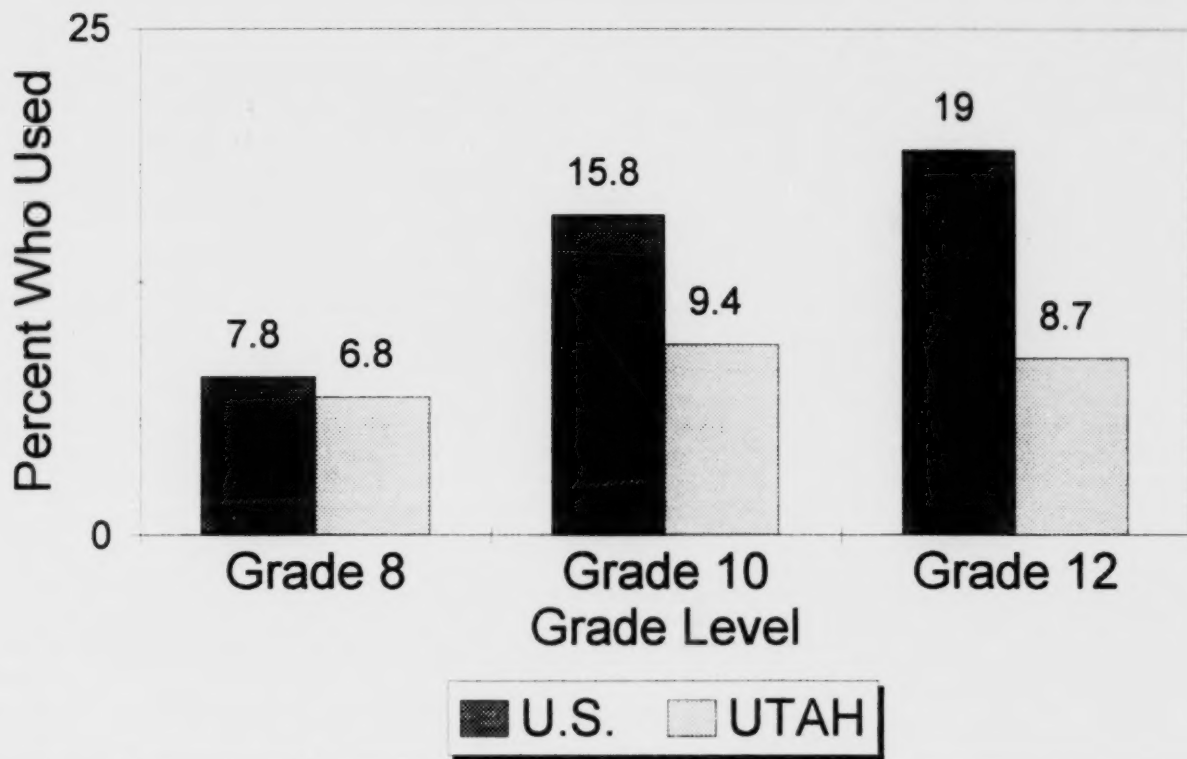


FIGURE 13
EVER USED AMPHETAMINES, 1994

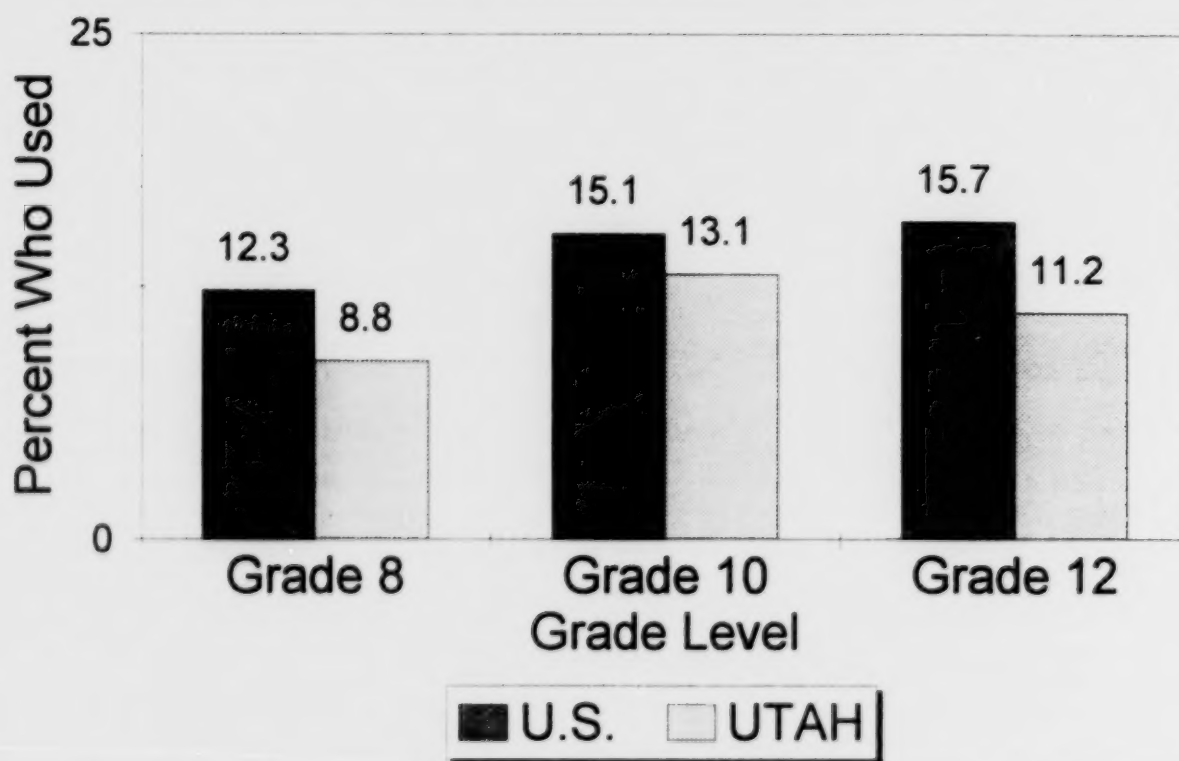
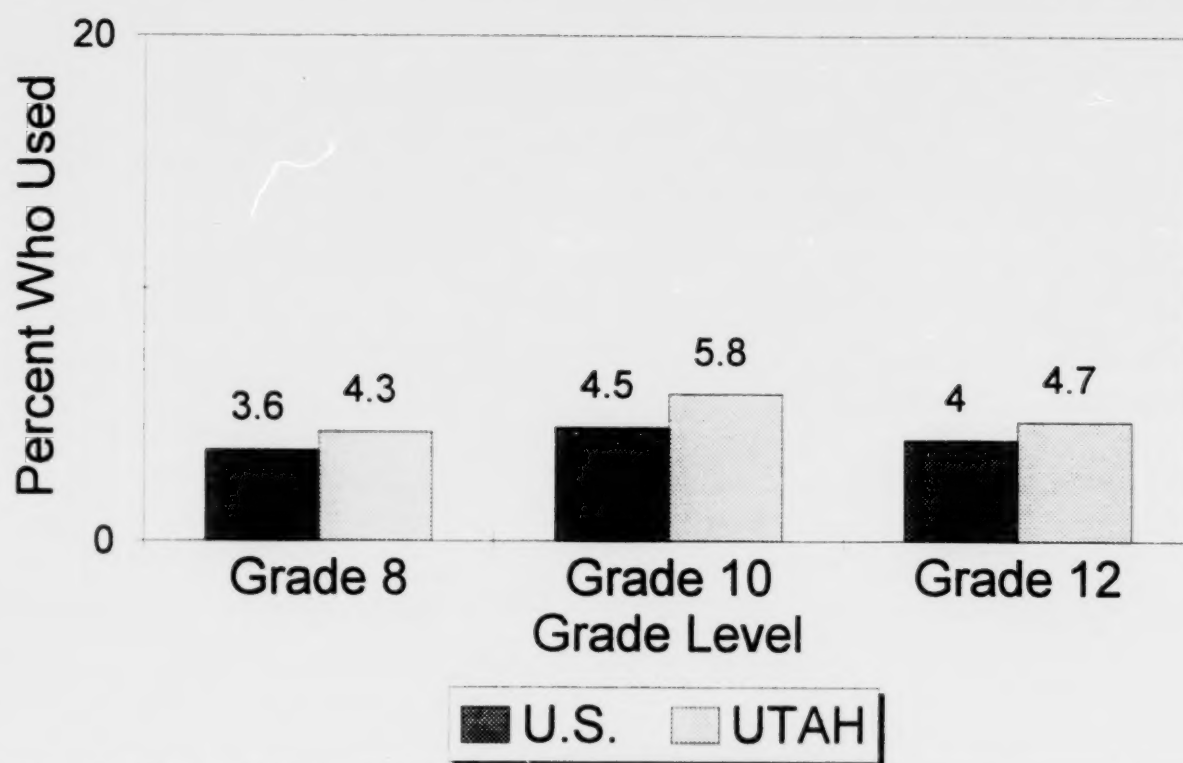


FIGURE 14

PAST MONTH AMPHETAMINE USE, 1994



Cocaine

Cocaine is a powerful natural stimulant which produces extraordinary psychic dependence because of the intensity of its pleasurable effects (Uelmen and Haddox, 1983). Six percent of high school seniors in the United States have taken cocaine compared to four percent for Utah seniors. Similarly, at both the tenth and eighth grade levels, the percentage of students who have ever used cocaine is slightly lower in Utah than in the United States (See Figure 15).

The percent of seniors that have used cocaine during the past month is about 1.5 percent in the United States and 2.5 percent in Utah, a difference that is within the margin of error. For eighth and tenth graders there is no difference between U.S. and Utah students in current or lifetime use of cocaine (See Figure 16).

Hallucinogens

The differences between U.S. and Utah adolescents in hallucinogen use are small. Eleven percent of U.S. seniors have tried a hallucinogen compared to eight percent of Utah seniors (See Figure 17). In both the U.S. and Utah, four percent of eighth graders say they have tried a hallucinogenic drug.

Less than four percent of both U.S. and Utah seniors have used a hallucinogen during the past month. Among both eighth and tenth graders, differences between the U.S. and Utah are slight, and current usage rates are less than four percent (See Figure 18).

FIGURE 15
EVER USED COCAINE, 1994

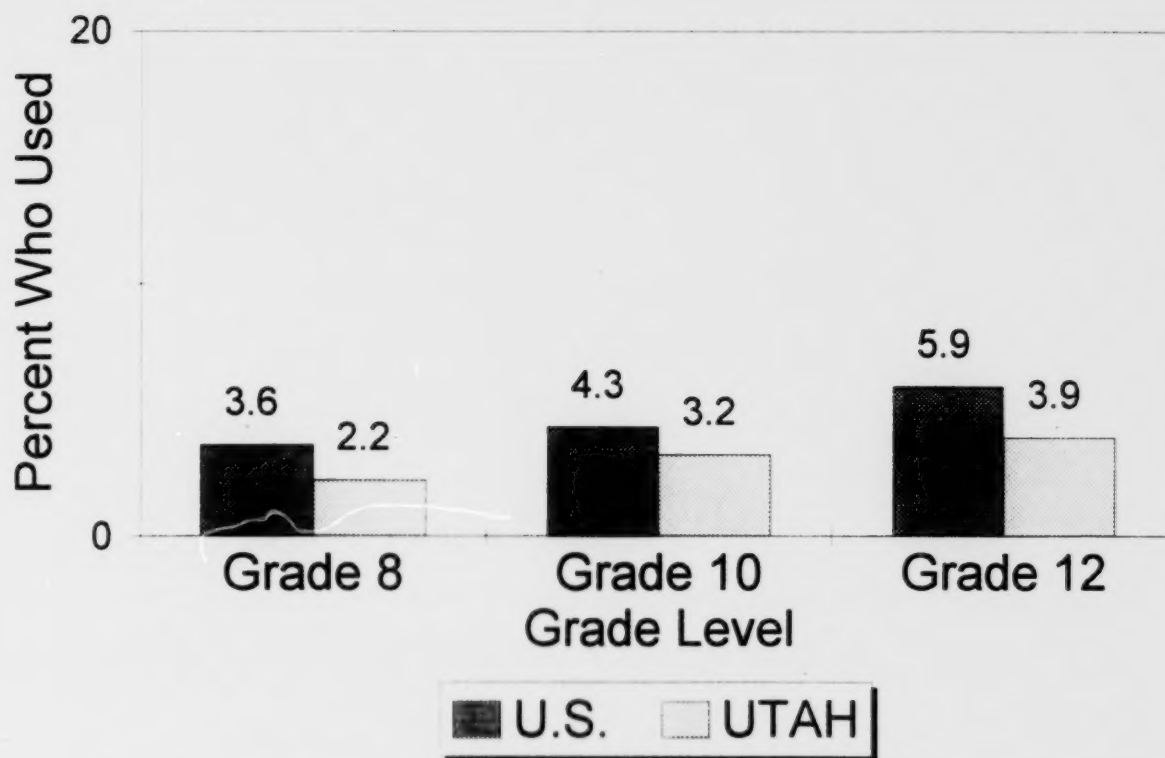


FIGURE 16
COCAINE USE PAST MONTH, 1994

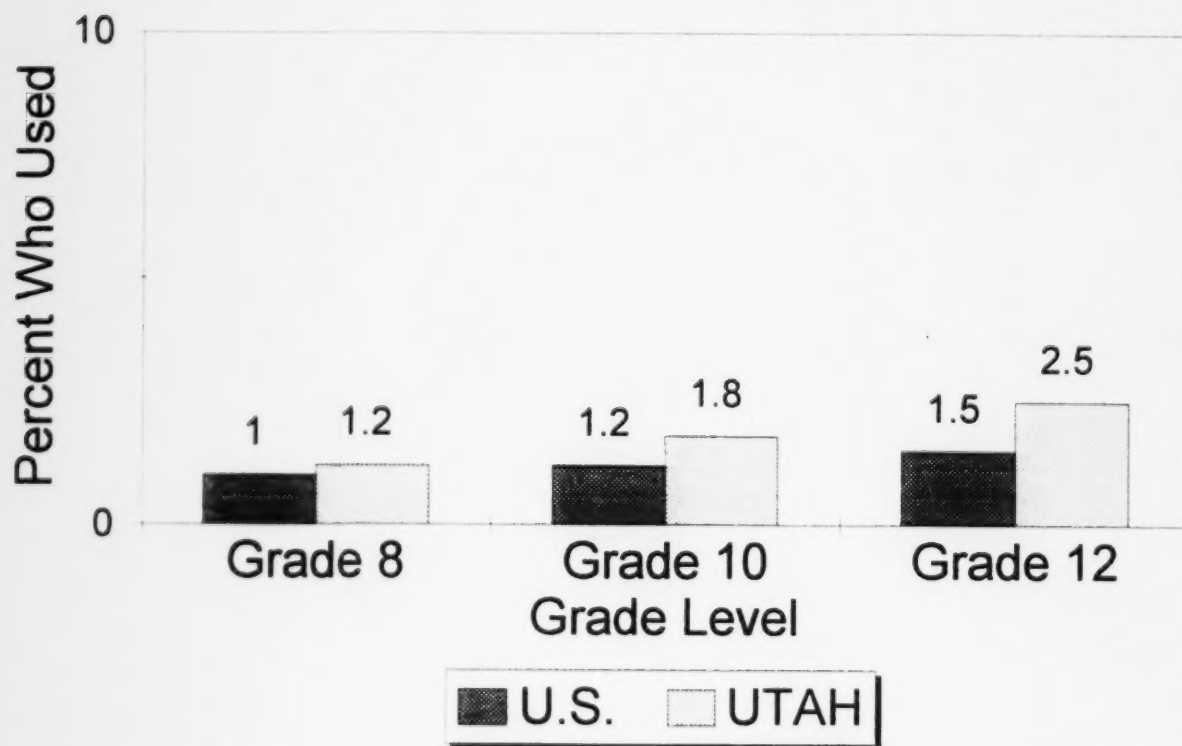


FIGURE 17
EVER USED HALLUCINOGENS, 1994

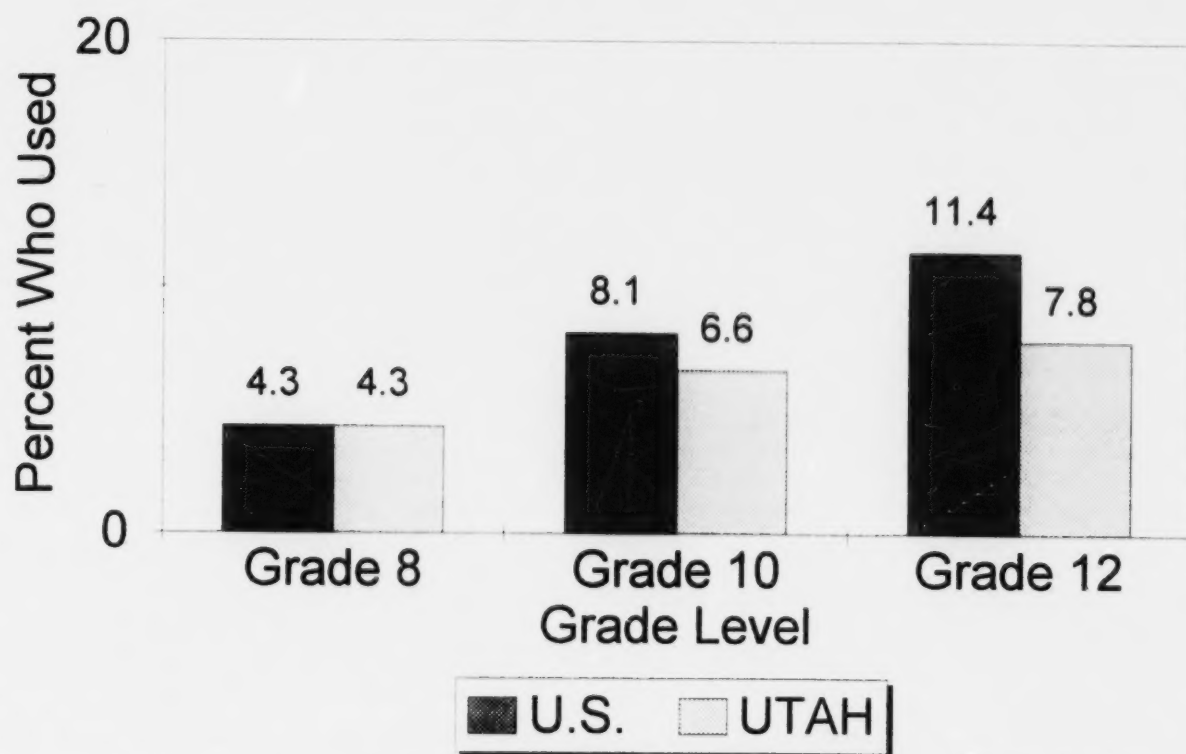
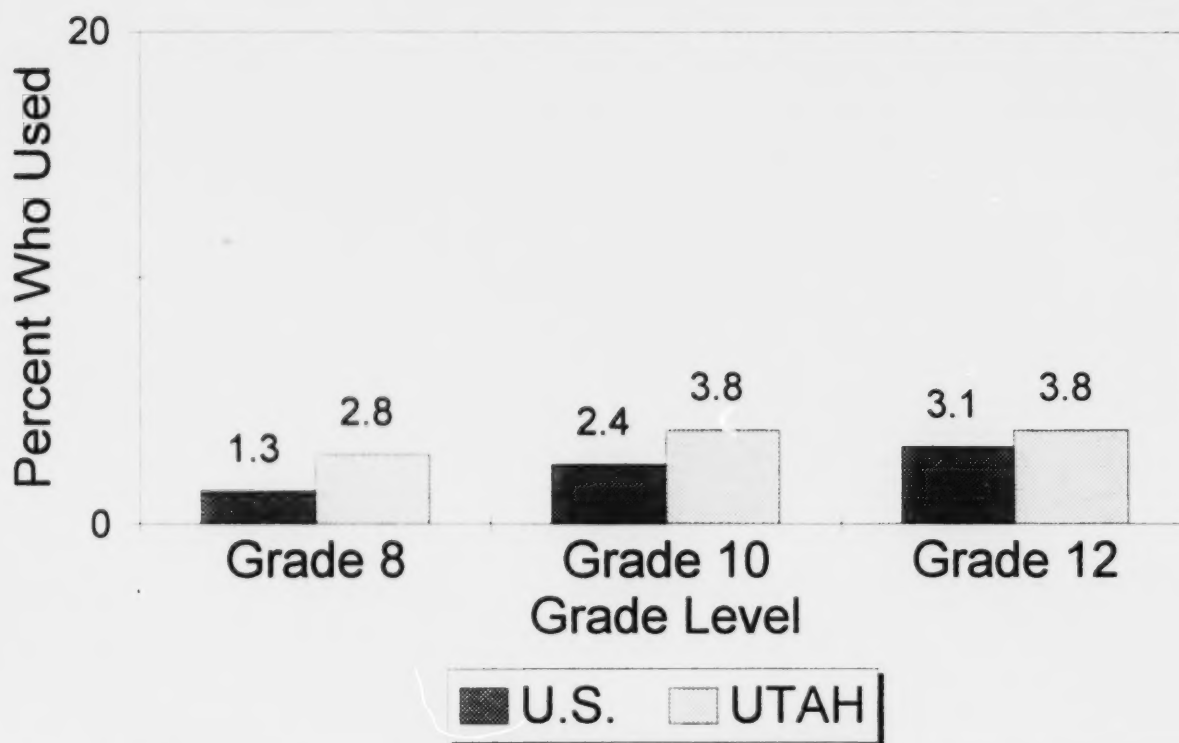


FIGURE 18

PAST MONTH HALLUCINOGEN USE, 1994



Heroin

Heroin use is extremely rare among adolescents. It is different than most other drugs in that use does not tend to increase with age. For example, two percent of U.S. eighth graders say they have tried heroin sometime in their lives, compared to 1.5 percent of U.S. tenth graders, and only 1.2 percent of U.S. seniors. Less than one percent have tried heroin during the past month.

There are only slight differences between U.S. and Utah adolescents in heroin use. At each grade level, the rates are higher in Utah than in the U.S., but the differences are small and not statistically significant (See Table 2).

Inhalants

It is not uncommon for adolescents to sniff glue or other gasses to "get high." For all three grade levels, ever use of inhalants is higher in the U.S. than in Utah. The largest difference is between seniors, where the U.S. percentage is 18 and the Utah percentage is 9 (See Figure 19).

For current use of inhalants, Utah adolescents are slightly higher than adolescents in the United States, although none of the differences is not statistically significant. The largest difference is among eighth graders, where the proportion of users is 7.4 in Utah and 5.6 in the U.S. (See Figure 20). For the other two grade levels, U.S. and Utah differences are small.

FIGURE 19
EVER USED INHALANTS, 1994

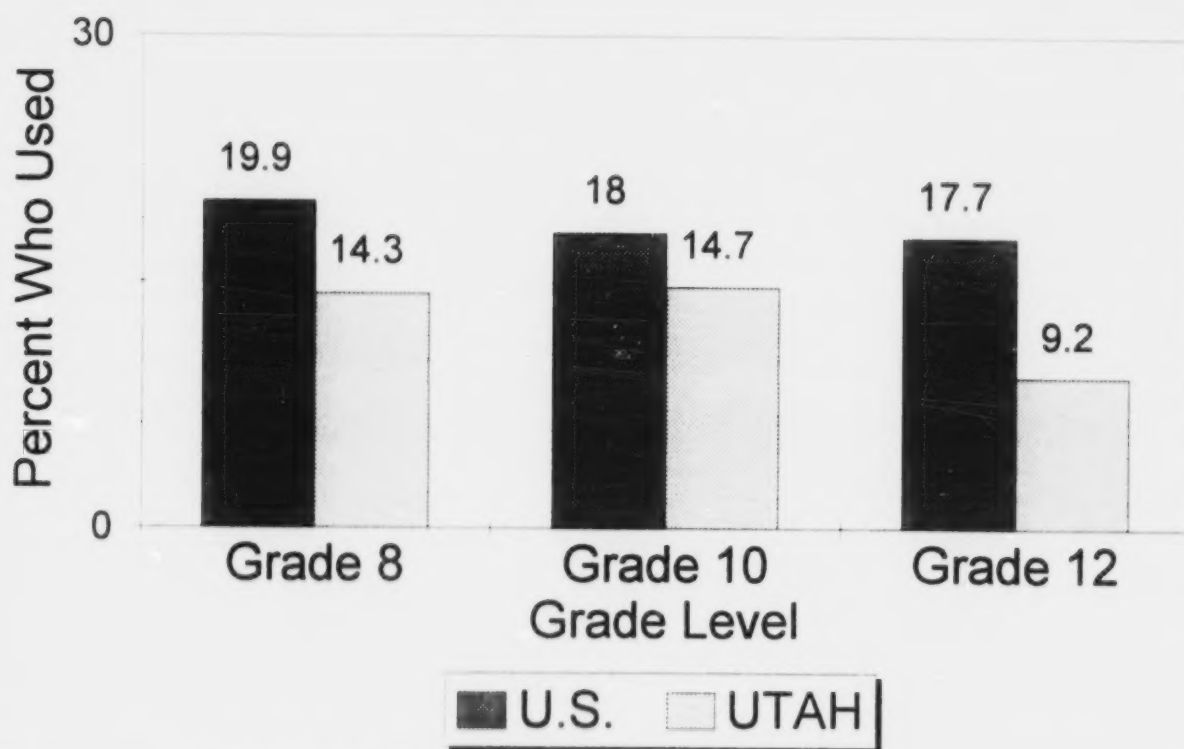
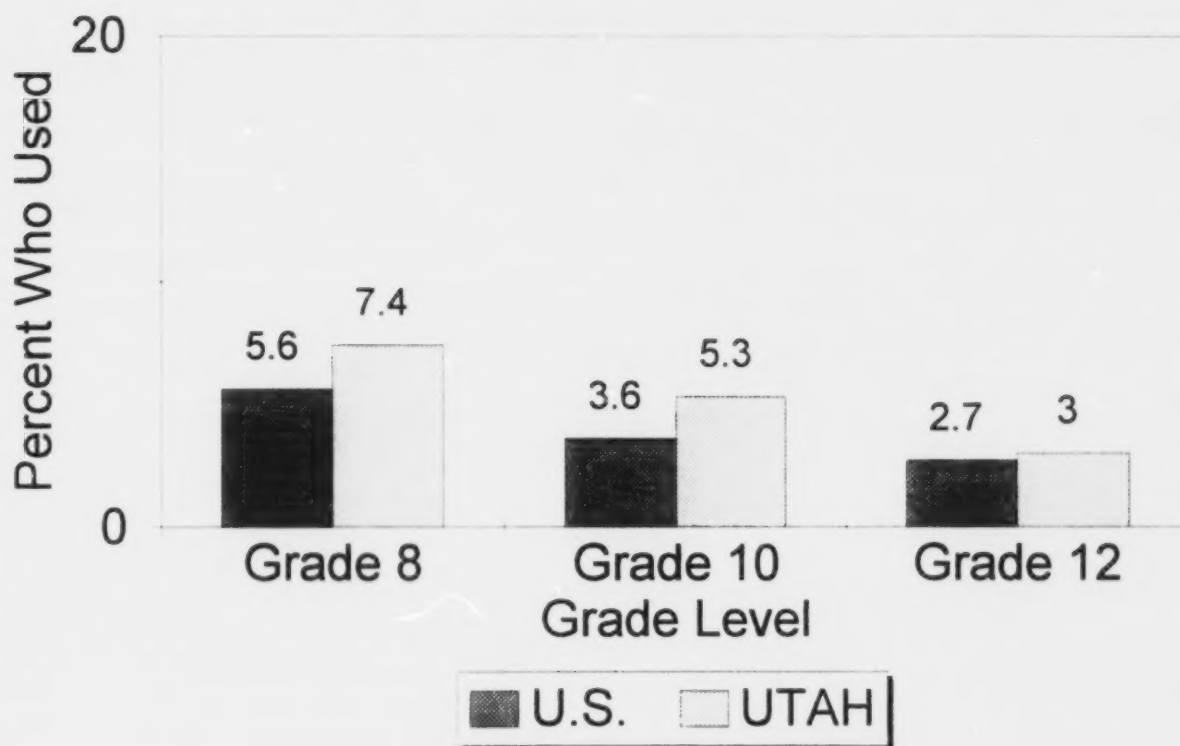


FIGURE 20

PAST MONTH INHALANT USE, 1994



CHAPTER 4

CHANGE FROM 1984 TO 1994

From 1984 to 1989 there were significant decreases in the proportion of Utah students in grades 7-12 who reported use of alcohol, tobacco, marijuana, amphetamines, barbiturates, tranquilizers, and cocaine. The decrease in current marijuana use was large, while decreases in current alcohol and tobacco use were also substantial. However, from 1989 to 1994 there have been increases in the use of cigarettes and marijuana. Among seventh and eighth grade students there have been increases in the proportion of students who use alcohol, cigarettes, marijuana, amphetamines, and inhalants.

This trend information was obtained by comparing the school surveys conducted in 1984, 1989, and 1994. All three surveys used the same methodology and questionnaire, making it possible to identify trends in drug use over the decade. I turn now to a detailed discussion of the changes from 1984 to 1994, focusing on current use.

Alcohol

From 1984 to 1994 there was a significant decrease in ever and past month use of alcohol. In 1984, 24.5 percent of adolescents in Utah used alcohol during the past month and this decreased to 18.6 percent by 1994.

There were differences among the grade levels. Among seventh and eighth graders, there was little change in current alcohol use from 1984 to 1994. For ninth and tenth graders,

current alcohol use dropped from 28.6 percent in 1984 to 19.5 percent in 1994. For juniors and seniors there was a drop from 35.6 percent in 1984 to 22.6 in 1994. Overall, This suggests that fewer students are involved in alcohol use in 1994 than in 1984. One concern among seventh and eighth grade students was an increase in the proportion of current users from 11.5 percent in 1989 to 14.1 percent in 1994.

Tobacco

The proportion of students that currently use tobacco has decreased somewhat over the decade from 16.3 percent in 1984 to 13.7 in 1994, although there has been no change from 1989 to 1994. There has been an increase in cigarette use, particularly among seventh and eighth graders. Among seventh and eighth graders, the percentage of current users increased from 6.5 percent in 1984 to 9.8 in 1994. For eighth and ninth graders, increased modestly from 11 percent in 1984 to 12.9 percent in 1994. For eleventh and twelfth graders, the proportion of current smokers went from 13 percent in 1984 to 14.9 percent in 1994. Every age group showed some increase, with the greatest increase occurring among the younger adolescents.

Marijuana

From 1984 to 1989 there were substantial decreases in marijuana use. In 1984, 11.8 percent of 7-12 grade students said they currently used marijuana and these percentage decreased to 6.1 percent in 1989. By 1994 use increased slightly to 7.9 percent.

Among students in grades 11-12, the proportion of users dropped from 18.2 in 1984 to 10.0 in 1989 and then remained the same in 1994 at 10.1. However, for students in grades 9-10, the proportion of current users went from 14 in 1984 to 6.5 in 1989 and then up to 8.9 in 1994. For students in grades 7-8, marijuana use went from 6.1 percent in 1984 to 2.2 percent in 1989, and then increased to 5.1 percent in 1994. These data show that during the past five years there has been a disturbing increase in marijuana use among the younger adolescents.

Amphetamines

It is not uncommon for students to experiment with various illegal stimulants (amphetamines, "speed"). Overall, there was a decrease in the proportion of users from 6.4 in 1984 to 3.9 in 1989, and then to 5.0 percent in 1994.

Among the older two groups (grades 9-10 and 11-12) there was a sharp decrease in amphetamine use from 1984 to 1989 and then no significant change from 1989 to 1994. However, for the youngest group (grades 7-8), there was a significant decrease from 4.1 percent in 1984 to 2.1 percent in 1989, and then a significant increase to 4.0 percent in 1994.

Depressants

The percentage of students who used depressant drugs decreased somewhat from 1984 to 1989 and did not change significantly from 1989 to 1994. For barbiturates, ever use among 7-12 graders went from 3.5 in 1984, to 1.7 in 1989, and

then to 2.8 in 1994. Tranquilizers show a similar trend from 7 percent in 1984 to 3.8 percent in 1994.

Again, however, the trends reverse for students in grades 7-8. For example, barbiturate use went from 2.7 in 1984 to 0.9 in 1989 and then increased to 2.3 in 1994. Although this is not a large increase, it is statistically significant. Tranquilizer use went from 2.7 percent in 1984, to 0.8 percent in 1989, and to then 1.4 in 1994.

Cocaine

In 1984, 6.5 percent of students in grades 7-12 said they had experimented with cocaine. By 1989 this percentage had decreased to 4.2 and by 1994 it had decreased further to 3.1. Current use showed a decrease from 3.5 percent in 1984 to 1.8 percent in 1994. For each grade level there were significant decreases from 1984 to 1989. For the juniors and seniors, there was a significant decrease from 1989 to 1994. For the younger two groups the change from 1989 to 1994 was insignificant. These data show that cocaine use decreased from 1984 to 1989, and has remained at a relatively low level since then.

Other Drugs

Differences between 1984 and 1989 were negligible in the proportion of Utah adolescents who reported ever and past month use of heroin, hallucinogens, and pain medications. However, there has been an increase in the use of inhalants among the younger grade levels. From 1984 to 1989 the percentage of seventh and eighth graders who have used inhalants during the

past month decreased from 5.6 in 1984 to 3.6 in 1989, and then increased to 6.9 percent in 1994. For lifetime use, the proportion of seventh and eighth grade users increased from 7.9 in 1989 to 12.9 in 1994.

An overall look at the trends from 1984 to 1994 was shown earlier in Table 1. A detailed listing of the trends by grade level is given in Table 7.

Table 7. Percent of Students Who Used Selected Drugs Ever and During Past Month by Grade: Utah, 1984-1994

Drug	Use	1984				1989				1994			
		7-8	9-10	11-12	Total	7-8	9-10	11-12	Total	7-8	9-10	11-12	Total
Alcohol	Month	14.4	28.6	35.6	24.5	11.5	22.3	32.9	21.8	14.1	19.5	22.6	18.6
Smokeless Tobacco	Month	-.	-.	-.	-.	-.	-.	-.	-.	4.1	5.8	6.2	5.3
Cigarettes	Month	6.5	11.0	13.0	9.6	5.6	11.1	15.4	10.5	9.8	12.9	14.9	12.4
Any Tobacco	Month	10.4	19.1	22.6	16.3	6.4	13.9	20.9	13.4	10.7	14.3	16.3	13.7
Marijuana	Ever	11.3	24.5	34.4	21.5	6.0	15.7	27.7	16.0	8.5	16.2	19.3	14.4
	Month	6.1	14.0	18.2	11.8	2.2	6.5	10.0	6.1	5.1	8.9	10.1	7.9
Amphetamines	Ever	6.7	14.9	20.6	13.0	3.9	10.5	15.6	9.8	7.4	11.7	12.0	10.3
	Month	4.0	7.7	8.5	6.4	2.1	4.8	5.1	3.9	4.0	5.6	5.5	5.0
Barbiturates	Ever	4.0	7.5	9.3	6.5	1.8	4.6	5.6	3.9	3.9	5.9	5.8	5.1
	Month	2.7	4.2	4.1	3.5	0.9	2.1	2.3	1.7	2.3	3.3	2.9	2.8
Tranquilizers	Ever	4.6	7.9	9.6	7.0	1.8	4.8	6.3	4.2	3.0	4.0	4.5	3.8
	Month	2.7	3.9	4.1	3.4	0.8	2.6	1.8	1.7	1.4	2.0	2.0	1.8
Cocaine	Ever	4.2	6.4	10.4	6.5	2.0	3.8	7.0	4.2	2.4	3.1	3.9	3.1
	Month	2.6	3.5	4.9	3.5	0.9	1.8	2.2	1.6	1.5	1.8	2.1	1.8
Heroin	Ever	2.1	2.2	1.9	2.1	0.8	1.1	1.1	1.0	1.6	1.7	1.7	1.7
	Month	1.8	1.7	1.5	1.7	0.5	0.6	0.5	0.5	1.1	1.0	1.0	1.0
Inhalants	Ever	11.8	14.2	12.3	12.7	7.9	12.9	12.7	11.0	12.9	14.3	10.3	12.5
	Month	5.6	5.8	3.7	5.2	3.6	5.6	3.5	4.2	6.9	5.9	3.7	5.5
Hallucinogens	Ever	4.3	8.2	12.3	7.6	2.6	5.9	10.9	6.3	3.6	5.9	8.8	6.0
	Month	2.9	4.5	5.1	4.0	1.4	2.7	4.2	2.7	2.2	3.6	4.7	3.5
Pain Medications	Ever	13.1	19.5	21.5	17.3	10.2	17.2	22.0	16.2	11.7	14.4	15.7	13.9
	Month	7.5	10.1	9.9	9.0	5.2	9.4	10.7	8.3	6.2	7.4	7.7	7.1
Sample Size		19530	15054	12081	46665	9574	8717	8497	26789	5690	4962	5138	15790

CHAPTER 5

SOCIAL CHARACTERISTICS AND DRUG USE

For most drugs, a higher percentage of males than females report use, although females are more likely to use amphetamines and pain medications. Drug use tends to be higher among minority groups, except for Asians. Some major risk factors for adolescent drug use are having siblings, parents, and friends who use drugs, being exposed to drug use at an early age, weak family bonds, and poor academic performance. In this chapter I examine how a number of social characteristics are associated with adolescent drug use.

Gender and Drug Use

A comparison of female and male drug use is shown in Table 8. For amphetamines and pain medications, female use is higher than for males, while for the alcohol, tobacco, marijuana, cocaine, heroin, and hallucinogens, the percentage of users is higher among males. The largest gender difference is for smokeless tobacco where 8 percent of the males are current users compared to 2 percent of the females.

Current alcohol use is slightly higher among the males than females, 19.9 to 17.3 percent, respectively. The males also drink more frequently and in larger quantities than the females. Furthermore, 9.5 percent of the males are current marijuana users compared to 6.3 percent of the females. There are no gender differences in the use of barbiturates, tranquilizers, or inhalants.

Table 8. Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month by Gender: Utah, 1994

<u>Drug</u>	<u>Female</u>	<u>Male</u>
Alcohol	17.3	19.9*
Smokeless Tobacco	2.4	8.4*
Cigarettes	11.6	13.3*
Marijuana	6.3	9.5*
Amphetamines	5.8*	4.2
Barbiturates	2.9	2.6
Tranquilizers	1.7	1.9
Cocaine	1.1	2.4*
Heroin	0.5	1.5*
Inhalants	5.1	5.9
Hallucinogens	2.5	4.4*
Pain Medications	8.3*	5.8
Sample Size	8107	7604

*p <.01 (Significant difference between females and males).

Drug Use Among Ethnic Groups

A comparison of drug use among five ethnic groups is shown in Table 9. Overall, drug use tends to be lower among whites and Asians than among African Americans, American Indians, or Latinos. Alcohol, cigarettes, and amphetamines are more prevalent among Latinos than among the other groups. African Americans are more likely than the other groups to use smokeless tobacco, marijuana, cocaine, and hallucinogens.

The largest group differences are for alcohol. Thirty-eight percent of Latinos and 34 percent of African Americans currently use alcohol compared to 18 percent among Asians and 17 percent among whites.

Drug Environment

Sixteen percent of Utah adolescents in grades 7-12 say that a family member has a problem with alcohol. Ten percent report that a family member has a problem with drug use, and three percent feel it is a big problem (See Table 10).

Thirty-eight percent of Utah adolescents have at least one friend who drinks regularly. Thirty-four percent say that one of their best friends has used marijuana. Almost one-third have a close friend who has taken other drugs for non-medical reasons, and ten percent note that they have four or more such friends (See Table 11). Taken together, these data indicate that large numbers of Utah adolescents have family members and close friends who regularly use illegal drugs.

Table 9. Percent of Students in Grades 7-12 Using Various Drugs During Past Month by Ethnic Group: Utah, 1994

<u>Drug</u>	<u>African American</u>	<u>American Indian</u>	<u>Asian</u>	<u>Latino</u>	<u>White</u>
Alcohol	34.0	25.0	18.4	37.9	16.9
Cigarettes	21.1	21.8	11.5	24.1	11.2
Smokeless Tobacco	13.8	10.6	8.8	8.3	4.6
Marijuana	22.3	11.2	9.1	20.6	6.7
Amphetamines	4.6	6.0	3.3	8.2	4.7
Barbiturates	7.0	3.7	3.0	3.3	2.6
Tranquilizers	4.7	2.0	3.2	4.4	1.5
Cocaine	10.4	2.0	2.4	3.2	1.5
Heroin	6.4	0.6	2.3	2.2	0.8
Inhalants	11.3	7.5	4.3	9.6	4.9
Hallucinogens	10.1	6.1	2.0	5.8	3.1

Table 10. Percent of Utah Students in Grades 7-12 Who Say a Family Member Has a Problem with Alcohol or Drug Use

<u>Degree of Problem</u>	<u>Alcohol</u>	<u>Drug Use</u>
A Moderate Problem	11.3	6.7
A Big Problem	<u>4.5</u>	<u>3.0</u>
Total	15.8	9.7

Table 11. Percent of Utah Students in Grades 7-12 With One or More Best Friends Who Have Used Various Drugs

Number of Best Friends Who. . .	Drink <u>Alcohol</u>	Have Used <u>Marijuana</u>	Have Used Other <u>Drugs</u>
One	10.7	9.8	10.2
Two	7.0	6.3	6.3
Three	4.7	4.4	4.0
Four or More	<u>15.5</u>	<u>13.9</u>	<u>9.6</u>
Total	37.9	34.4	30.1

Multiple Drug Use

Some students may use more than one type of drug. The two most commonly used drugs are alcohol and tobacco. Ten percent of the students have used both alcohol and tobacco during the past month (See Table 12). About half of all the alcohol users also use tobacco, while 79 percent of all the tobacco users also use alcohol.

Almost seven percent of the students in grades 7-12 say that they used both alcohol and marijuana during the past month (See Table 12). Eighty-three percent of the marijuana users also report the use of alcohol. On the other hand, about two-thirds of all alcohol users did not use marijuana.

These data show that there is a cumulative progression of use from alcohol to tobacco to marijuana. A large majority of tobacco users also use alcohol, and a large majority of marijuana users also use tobacco and alcohol. Alcohol appears to be a necessary condition for use of the other drugs. Many alcohol users do not use other drugs, but it is relatively rare for students to use tobacco or marijuana without also using alcohol.

Table 12. Multiple Use of Alcohol, Tobacco, and Marijuana During Past Month by Students in Grades 7-12

<u>Use During Past Month</u>		<u>Percent</u>
<u>Alcohol</u>	<u>Tobacco</u>	
No	No	78.9
Yes	No	8.6
No	Yes	2.6
Yes	Yes	9.9
<u>Alcohol</u>	<u>Marijuana</u>	
No	No	80.0
Yes	No	12.0
No	Yes	1.4
Yes	Yes	6.6

Risk Factors and Drug Use

Much research has been devoted to understanding why students use drugs and what can be done to minimize the risk of drug abuse. Numerous factors have been found to be associated with adolescent drug use, but it has been difficult to integrate the various findings and theories. Hawkins et al. (1992) have identified a number of risk factors that are associated with the probability of drug use among adolescence. Some of the major risk factors are early use of alcohol or other drugs, use by family members, poor relationships with parents, family conflict, peer use, and poor grades in school. In this section I discuss each of these risk factors and identify the proportion of Utah students at risk.

Age at First Use

The age at first use of various drugs may influence subsequent drug use (Bahr and Marcos, 1986; Harrison, 1992). Since alcohol use usually precedes use of other substances, age at first alcohol use may be a particularly important risk factor. I also included ages at first cigarette and marijuana use as risk factors. Students who had their first cigarette or alcohol use at age 12 or younger are considered at risk, as are students who say they had their first cigarette by age 12.

Seventeen percent of Utah students have a cigarette by age 12, 15 percent have had alcohol by age 12, and 9 percent have taken marijuana before age 15 (See Table 13).

Table 13. Percent of Students with Each of 18 Risk Factors.

Risk Factor	Percent
<u>Age of First Use</u>	
1. Cigarette - 12 or less	16.5
2. Alcohol - 12 or less	15.1
3. Marijuana - 14 or less	9.1
<u>Family Bonding</u>	
4. Low closeness to mother	12.2
5. Low closeness to father	19.9
6. Low parental monitoring	11.9
7. High family conflict	15.2
<u>School</u>	
8. Low school involvement	16.8
<u>Use by Peers</u>	
9. Two or more best friends who drink regularly, use tobacco, and have tried marijuana and other illegal drugs.	20.5
<u>Use by Family Members</u>	
10. Siblings drink, smoke, and have used marijuana	11.4
11. Parents smoke and drink	11.9
12. A family member has moderate or big substance use problem	8.8
<u>Other Risk Factors</u>	
13. Low religious involvement	19.5
14. Dislike neighborhood	20.4
15. Parent divorced or remarried in past year	15.2
16. Changed residence or school in last year	10.1
17. Say smoking and drinking are not harmful	7.1
18. Say it is ok to cheat & steal if don't get caught	8.4

Family Bonding

A number of scholars have found that the probability of adolescent drug use is higher if the parent-adolescent relationship is strained (Marcos and Johnson, 1988; Ary et al., 1993; Andrews et al., 1993; Hardert and Dowd, 1994). I have four different measures of family bonding: (1) Closeness to mother, (2) Closeness to father, (3) Low parental monitoring, and (4) High levels of family conflict. Students are considered at risk if they responded "no" to a series of items about feeling close, spending time with, and communicating with their mother and father.

Parental monitoring is defined as low if the adolescent said their parents do not request that they call if they are going to be late, and if their parents usually do not know where they are or who they are with. High family conflict exists if students said that in their family there is a lot of fighting, people sometimes hit each other, and people sometimes throw things at each other.

School Involvement and Success

Four items from the questionnaire were included as risk factors related to education. Students were asked if they try hard in school, if it's important to get good grades, if they want to go to college, and what type of grades they receive.

Peer Characteristics

Four items regarding use by friends and associates were used to determine risk in this area. The four items asked how many of their best friends drink alcohol regularly, use tobacco regularly, have used marijuana, and have taken other drugs for non-medical reasons. Those who responded "two or more" to all four items were considered at risk.

There were also scales for religious involvement, attachment to neighborhood, parental divorce/remarriage, moving to a new house or school, honesty, and perceived harmfulness of drugs. The listing of each of the 18 risk factors is shown in Table 13, along with the percent of Utah students classified as at risk for each factor.

We totaled the number of risk factors and calculated how the percentage of users varies as number of risk factors increased. As shown in Table 14, for all drugs the percentage of users varies dramatically by number of risk factors. To illustrate, only three percent of those with zero or one risk factor have used alcohol during the past month, compared to 65 percent of those with eight or more risk factors. Less than one percent of those with zero or one risk factor have used marijuana during the past month, compared to 44 percent of those with eight or more risk factors. The comparable percentages for cocaine are 0.1 and 12.4, respectively. The number of risk factors is associated strongly with drug use among Utah

adolescents. However, the number of risk factors is not a powerful predictor of tranquilizer or cocaine use. For example, among students with eight or more risk factors, 88 percent have not used cocaine during the past month. Therefore, these factors are not causes but should be considered characteristics that tend to increase the risk of drug.

Drug use continues to be a serious adolescent problem when one considers that during a given month more than one in five Utah seniors has used alcohol, thirteen percent have smoked cigarettes, and almost one in ten has taken marijuana; five percent have used amphetamines illegally and 2.5 percent have taken cocaine.

Table 14. Percent of Students who Used Various Drugs by Number of Risk Factors: Utah, 1994.

<u>Drug</u>	<u>Number of Risk Factors</u>			
	<u>0-1</u>	<u>2-4</u>	<u>5-7</u>	<u>8-13</u>
Tobacco	1.1	9.2	25.2	33.2
Alcohol	3.0	18.8	45.2	65.3
Marijuana	0.4	5.3	20.3	44.3
Amphetamines	0.5	4.2	12.6	19.5
Tranquilizers	0.3	1.1	4.4	7.7
Cocaine	0.1	0.5	3.6	12.4
Inhalant	0.5	9.7	12.8	28.3
Hallucinogen	0.3	2.2	7.1	23.0
Pain Medications	2.5	7.0	14.5	25.6
Sample Size	5,032	3,101	1,326	560

CHAPTER 6

PLANNING DISTRICT COMPARISONS

Utah is divided into 13 geographical regions which are called planning districts. In this section I provide a general comparison of those 13 planning districts and then examine each district in some detail.

Table 15 provides a comparison of each planning district on current use among students in grades 7-12. For alcohol, the Utah and Bear River regions have the lowest rates of use (11 and 13 percent, respectively), while Tooele and Four Corners have the highest. Among the latter two regions, about one-third of the adolescents have consumed alcohol during the past month.

Students were asked if they have had five or more drinks in a row during the past two weeks. The Summit, Central, and Four Corners regions are the highest at about 13 percent, while Bear River is the lowest at 5 percent.

Twelve percent of Utah students have smoked during the past month and 5 percent have used smokeless tobacco. Tobacco use is highest in the Tooele, Central, Uintah, and San Juan planning districts where almost one student in five smokes. Smoking is lowest in Utah County at 8.5 percent.

Current marijuana use is highest in the Tooele and Four Corners districts where more than 12 percent of 7-12 graders report using marijuana during the past month. Marijuana use is lowest in the Bear River district at 4.2 percent.

Table 15. Percent of Students in Grades 7-12 Who Reported Using Various Drugs During Past Month: Utah, 1994

<u>Drug</u>	<u>Planning District</u>													
	<u>BrRv</u>	<u>Webr</u>	<u>StLk</u>	<u>Davs</u>	<u>Tol</u>	<u>Was</u>	<u>Utah</u>	<u>Sum</u>	<u>Cen</u>	<u>Swst</u>	<u>Uint</u>	<u>FCor</u>	<u>SnJn</u>	<u>State</u>
Alcohol	12.5	21.4	21.3	16.3	29.3	16.9	11.3	23.8	21.9	18.7	23.5	31.1	18.4	18.6
5 Drinks ^a	5.3	8.7	8.1	6.0	12.2	8.6	5.7	12.9	13.1	8.5	11.3	13.6	11.5	7.9
Smokeless Tobacco	4.2	5.8	4.8	3.0	7.6	7.5	4.5	9.9	11.8	8.6	10.4	7.5	12.1	5.3
Cigarettes	11.1	14.5	12.9	10.2	18.2	13.4	8.5	12.5	18.5	14.3	18.3	17.2	19.2	12.4
Marijuana	4.2	9.2	9.5	6.9	12.5	6.6	5.3	10.5	8.3	7.8	6.1	12.2	9.5	7.9
Amphetamines	4.9	5.3	5.1	5.4	5.9	6.4	3.7	5.1	7.5	5.7	5.0	6.7	5.3	5.0
Barbiturates	1.2	2.9	3.0	3.2	3.3	2.2	2.2	2.1	4.5	3.0	2.8	5.1	3.9	2.8
Tranquilizers	0.9	1.6	2.0	2.0	1.4	1.5	1.3	2.4	2.7	2.6	1.5	2.8	1.9	1.8
Cocaine	1.0	1.3	2.2	1.4	2.5	1.5	1.1	2.8	3.0	2.5	1.6	2.6	1.8	1.8
Heroin	0.5	0.5	1.2	1.3	1.6	0.8	0.6	1.1	1.1	1.5	0.7	2.0	1.6	1.0
Inhalants	5.4	5.7	6.0	4.0	6.8	4.3	4.4	6.4	6.0	5.8	4.5	10.1	5.0	5.5
Hallucinogens	1.1	3.5	4.4	3.4	6.9	2.4	2.1	5.5	3.9	2.7	2.5	3.7	5.3	3.5
Pain Medications	6.0	7.4	7.0	7.0	10.8	8.4	6.4	9.4	9.0	7.1	7.0	10.5	9.1	7.1
Sample Size	1326	1276	2536	1046	694	531	2656	749	764	2478	820	505	387	15790

PLANNING DISTRICT KEY: BrRv = Bear River; Webr = Weber; StLk = Salt Lake; Davs = Davis; Tol = Tooele; Was = Wasatch; Utah = Utah; Sum = Summit; Cen = Central; Swst = Southwest; Uint = Uintah; FCor = Four Corners; SnJn = San Juan; State = State of Utah.

^aHad 5 or more drinks in a row within the past 2 weeks.

For the other drugs, the differences among the planning districts tend to be relatively small. Inhalant use is noticeably higher in the Four Corners planning district where it is 10 percent compared to 5.5 percent for the entire state. Use of hallucinogens is somewhat higher in Tooele than in the other areas, 6.9 percent compared to 3.5 percent for the state. Illegal use of pain medications is highest in the Tooele and Four Corners areas. Overall, the Four Corners, Central, and Tooele planning districts tend to have the highest proportion of students who currently use various drugs, while the Bear River and Utah County districts tend to have the lowest proportion of current users.

These comparisons look at the proportion of adolescents within each planning district who use various substances. The total number of users is a function of the population size and the proportion of users. Heavily populated areas will have high numbers of users even though their usage rates may be relatively low. For example, Utah County tends to have relatively low usage rates for most substances. However, because it has 16 percent of Utah's adolescent population, it has many more users than most less populated areas.

To illustrate, let us examine the percentage of adolescents who have had five or more drinks in a row during the past two weeks. This percentage is more than twice as high in the Four Corners district than in Utah County, 13.6 compared to 5.7

percent. When we multiply the total number of students in each area by the proportion of users, we find that the Four Corners area has about 665 students who have had five or more drinks in a row during the past two weeks, compared to 1,941 in Utah County. The total number of adolescents abusing alcohol is more than three times as great in Utah County than in the Four Corners planning district.

A comparison of marijuana use in Salt Lake and Tooele counties yields even greater differences. Tooele County has the highest rate of current marijuana use at 12.5 percent, compared to 9.5 percent in Salt Lake County. Salt Lake County has about 38 percent of the state's population compared to 1.6 percent in Tooele County. When the student populations are multiplied by the proportion of users, we find that Tooele has about 425 current marijuana users compared to 7,683 in Salt Lake County. Although percentage comparisons are useful, these data show that population figures need to be taken into account when estimating the total number of students who are using drugs.

Now I turn to an examination of each planning district separately. For each district, I present a comparison of 1989 and 1994 data and then a comparison by grade level.

Bear River

The Bear River planning district tends to have low rates of use relative to other areas of Utah. From 1989 to 1994 there has been a significant decrease in the proportion of students currently drinking alcohol but an increase in the percentage of students who have used inhalants during the past month (See Tables 16 & 17).

Table 16. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Bear River Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	17.0	12.5	-4.5*
Cigarettes	10.0	11.1	+1.1
Marijuana	3.9	4.2	+0.3
Amphetamines	3.0	4.9	+1.9
Barbiturates	1.2	1.2	0.0
Tranquilizers	1.7	0.9	-0.8
Cocaine	1.3	1.0	-0.3
Heroin	0.4	0.5	+0.1
Inhalants	2.8	5.4	+2.6*
Hallucinogens	1.0	1.1	+0.1
Pain Medications	6.3	6.0	-0.3
Sample Size	2274	1326	

*p <.01 (Significantly different than comparable 1989 data).

Table 17. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Bear River Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	9.8	12.7	15.9	12.5
5 Drinks*	4.7	5.1	6.3	5.3
Smokeless Tobacco	4.3	4.4	3.9	4.2
Cigarettes	9.4	11.1	13.2	11.1
Marijuana	2.9	5.5	4.4	4.2
Amphetamines	4.7	5.8	4.2	4.9
Barbiturates	1.4	0.9	1.3	1.2
Tranquilizers	0.8	0.7	1.3	0.9
Cocaine	1.0	0.9	1.0	1.0
Heroin	0.6	0.2	0.8	0.5
Inhalants	7.3	5.8	2.6	5.4
Hallucinogens	1.2	1.4	0.8	1.1
Pain Medications	6.1	6.0	5.7	6.0
Sample Size	511	432	384	1326

*Had 5 or more drinks in a row within the past two weeks.

Weber

The Weber planning district is quite similar to state averages on most drugs. There have been no major changes during the past five years, although alcohol use has dropped somewhat and there have been modest increases in cigarette and marijuana use (See Tables 18 & 19).

Table 18. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Weber Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	26.4	21.4	-5.0*
Cigarettes	11.5	14.5	+3.0
Marijuana	6.3	9.2	+2.9
Amphetamines	4.6	5.3	+0.7
Barbiturates	1.7	2.9	+1.2
Tranquilizers	1.3	1.6	+0.3
Cocaine	1.6	1.3	-0.3
Heroin	0.4	0.5	+0.1
Inhalants	4.4	5.7	+1.3
Hallucinogens	1.2	3.5	+2.3
Pain Medications	8.3	7.4	-0.9
Sample Size	2273	1276	

*p <.01 (Significantly different than comparable 1989 data).

Table 19. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Weber Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	15.6	26.8	22.4	21.4
5 Drinks*	5.7	11.0	9.7	8.7
Smokeless Tobacco	3.7	8.5	5.4	5.8
Cigarettes	12.5	17.8	13.4	14.5
Marijuana	5.3	13.9	8.8	9.2
Amphetamines	4.4	6.6	5.1	5.3
Barbiturates	1.5	4.6	2.7	2.9
Tranquilizers	0.7	2.4	1.7	1.6
Cocaine	0.7	2.2	1.2	1.3
Heroin	0.4	0.2	0.7	0.5
Inhalants	5.9	8.0	3.2	5.7
Hallucinogens	1.5	5.9	3.2	3.5
Pain Medications	7.1	8.8	6.4	7.4
Sample Size	454	411	411	1276

*Had 5 or more drinks in a row within the past two weeks.

Salt Lake

The Salt Lake planning district is quite similar to the state in the proportion of users of each drug. From 1989 to 1994, there has been a decrease in the proportion of adolescents who say they have used alcohol during the past month, from 25.3 in 1989 to 21.3 in 1994. All other changes are small (See Tables 20 & 21).

Table 20. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Salt Lake Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	25.3	21.3	-4.0*
Cigarettes	11.2	12.9	+1.7
Marijuana	7.8	9.5	+1.7
Amphetamines	3.9	5.1	+1.2
Barbiturates	1.8	3.0	+1.2
Tranquilizers	1.6	2.0	+0.4
Cocaine	1.7	2.2	+0.5
Heroin	0.6	1.2	+0.6
Inhalants	3.7	6.0	+2.3
Hallucinogens	2.4	4.4	+2.0
Pain Medications	8.1	7.0	-1.1
Sample Size	6658	2536	

*p <.01 (Significantly different than comparable 1989 data).

Table 21. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Salt Lake Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	18.3	19.3	25.2	21.3
5 Drinks*	5.5	7.6	10.4	8.1
Smokeless Tobacco	3.8	4.7	5.6	4.8
Cigarettes	10.7	11.2	16.0	12.9
Marijuana	6.5	8.7	12.4	9.5
Amphetamines	3.7	5.5	5.7	5.1
Barbiturates	2.5	2.9	3.3	3.0
Tranquilizers	1.8	2.0	2.2	2.0
Cocaine	1.8	1.7	2.8	2.2
Heroin	1.3	1.1	1.2	1.2
Inhalants	9.1	5.3	4.4	6.0
Hallucinogens	2.9	3.6	6.2	4.4
Pain Medications	6.3	6.8	7.5	7.0
Sample Size	681	880	976	2536

*Had 5 or more drinks in a row within the past two weeks.

Davis

The Davis planning district tends to be slightly below state rates for alcohol and tobacco use and quite similar to the state for other drugs. The rates for 1989 and 1994 are very similar, with no major increases or decreases in the proportion of users (See Tables 22 & 23).

Table 22. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Davis Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	15.2	16.3	+1.1
Cigarettes	8.6	10.2	+1.6
Marijuana	4.7	6.9	+2.2
Amphetamines	3.4	5.4	+2.0
Barbiturates	1.5	3.2	+1.7
Tranquilizers	1.5	2.0	+0.5
Cocaine	1.5	1.4	-0.1
Heroin	0.4	1.3	+0.9
Inhalants	4.5	4.0	-0.5
Hallucinogens	1.2	3.4	+2.2
Pain Medications	7.1	7.0	-0.1
Sample Size	2001	1046	

*p <.01 (Significantly different than comparable 1989 data).

Table 23. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Davis Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	14.4	17.1	17.7	16.3
5 Drinks ^a	4.3	6.2	8.0	6.0
Smokeless Tobacco	2.8	2.8	3.4	3.0
Cigarettes	8.1	11.8	11.3	10.2
Marijuana	5.3	8.7	7.1	6.9
Amphetamines	5.3	5.0	5.9	5.4
Barbiturates	2.5	4.0	3.1	3.2
Tranquilizers	1.3	2.8	2.2	2.0
Cocaine	1.5	1.9	0.9	1.4
Heroin	1.5	1.6	0.6	1.3
Inhalants	5.3	4.3	1.9	4.0
Hallucinogens	2.0	3.7	4.7	3.4
Pain Medications	5.1	7.8	8.8	7.0
Sample Size	397	322	327	1046

^aHad 5 or more drinks in a row within the past two weeks.

Tooele

Tooele is significantly above the state in the proportion of students who use alcohol, tobacco, marijuana, hallucinogens, and pain medications. Since 1989, there has been a 5.7 percent increase in cigarette users, as well as increases in marijuana and hallucinogen use. One-third of juniors and seniors report using alcohol during the past month and one in five smokes cigarettes (See Tables 24 & 25).

Table 24. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Tooele Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	32.9	29.3	-3.6
Cigarettes	12.5	18.2	+5.7*
Marijuana	8.3	12.5	+4.2*
Amphetamines	5.4	5.9	+0.5
Barbiturates	2.3	3.3	+1.0
Tranquilizers	2.0	1.4	-0.6
Cocaine	2.7	2.5	-0.2
Heroin	0.4	1.6	+1.2
Inhalants	4.4	6.8	+2.4
Hallucinogens	2.4	6.9	+4.5*
Pain Medications	9.3	10.8	+1.5
Sample Size	701	692	

*p <.01 (Significantly different than comparable 1989 data).

Table 25. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Tooele Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	20.3	29.5	36.8	29.3
5 Drinks*	7.0	11.9	16.9	12.2
Smokeless Tobacco	5.0	9.5	7.8	7.6
Cigarettes	15.8	16.4	22.2	18.2
Marijuana	8.9	11.5	16.9	12.5
Amphetamines	3.0	5.7	8.7	5.9
Barbiturates	1.0	3.4	5.2	3.3
Tranquilizers	0.5	1.9	1.8	1.4
Cocaine	3.0	1.1	3.5	2.5
Heroin	1.0	1.5	2.2	1.6
Inhalants	8.4	8.0	3.9	6.8
Hallucinogens	4.5	7.3	8.8	6.9
Pain Medications	8.4	12.6	11.0	10.8
Sample Size	202	261	231	694

*Had 5 or more drinks in a row within the past two weeks.

Wasatch

In the Wasatch planning district, the proportion of users is similar to state averages. Since 1989 there has been a significant increase in the use of cigarettes and pain medications. Cigarette users jumped from 8.4 percent to 13.4 percent, while the percentage of students who use pain medications increased from 4.2 percent to 8.4 percent (See Tables 26 & 27).

Table 26. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Wasatch Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	19.3	16.9	-2.4
Cigarettes	8.4	13.4	+5.0*
Marijuana	6.1	6.4	+0.3
Amphetamines	3.6	6.4	+2.8
Barbiturates	1.4	2.2	+0.8
Tranquilizers	1.4	1.5	+0.1
Cocaine	2.2	1.5	-0.7
Heroin	0.8	0.8	0.0
Inhalants	4.5	4.3	-0.2
Hallucinogens	2.5	2.4	-0.1
Pain Medications	4.2	8.4	+4.2*
Sample Size	358	531	

*p <.01 (Significantly different than comparable 1989 data).

Table 27. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Wasatch Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	9.7	12.2	28.7	16.9
5 Drinks*	2.7	6.7	16.5	8.6
Smokeless Tobacco	6.4	5.5	10.5	7.5
Cigarettes	10.8	11.6	17.8	13.4
Marijuana	1.6	4.2	13.2	6.4
Amphetamines	3.7	6.1	9.3	6.4
Barbiturates	2.1	1.8	2.7	2.2
Tranquilizers	0.5	1.8	2.2	1.5
Cocaine	1.1	0.6	2.7	1.5
Heroin	0.0	0.6	1.7	0.8
Inhalants	3.2	5.5	4.4	4.3
Hallucinogens	0.5	1.8	4.9	2.4
Pain Medications	3.7	9.7	12.1	8.4
Sample Size	186	164	181	531

*Had 5 or more drinks in a row within the past two weeks.

Utah

Utah County tends to have a relatively low proportion of users, particularly for alcohol and tobacco. Eleven percent of students in Utah County report using alcohol during the past month compared to 18.6 percent in the state as a whole. There have been decreases in the percentage of students who use alcohol and pain medications (See Tables 28 and 29).

Table 28. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Utah Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	16.1	11.3	-4.8*
Cigarettes	9.1	8.5	-0.6
Marijuana	3.9	5.3	+1.4
Amphetamines	4.6	3.7	-0.9
Barbiturates	1.9	2.2	+0.3
Tranquilizers	2.4	1.3	-1.1
Cocaine	1.2	1.1	-0.1
Heroin	0.6	0.6	0.0
Inhalants	4.8	4.4	-0.2
Hallucinogens	1.9	2.1	+0.2
Pain Medications	10.9	6.4	-4.5*
Sample Size	1524	2656	

*p < .01 (Significantly different than comparable 1989 data).

Table 29. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Utah Planning District, 1994

Drug	7-8	9-10	11-12	Total
Alcohol	7.0	11.9	14.1	11.3
5 Drinks*	3.3	5.7	7.7	5.7
Smokeless Tobacco	2.3	4.7	5.3	4.5
Cigarettes	5.7	9.7	9.2	8.5
Marijuana	3.5	6.4	6.1	5.3
Amphetamines	2.6	4.3	4.2	3.7
Barbiturates	1.6	3.2	1.8	2.2
Tranquilizers	0.7	1.8	1.3	1.3
Cocaine	1.0	1.3	1.1	1.1
Heroin	0.7	0.6	0.5	0.6
Inhalants	4.8	5.3	3.5	4.4
Hallucinogens	1.6	2.3	2.9	2.1
Pain Medications	5.1	6.2	7.9	6.4
Sample Size	1353	633	670	2656

*Had 5 or more drinks in a row within the past two weeks.

Summit

Twenty-four percent of Summit students say they have used alcohol during the past month, compared to 18.6 percent for the state. Almost one in ten has used smokeless tobacco compared to one in twenty across the state. There has been a decrease in current alcohol use, from 35.8 percent in 1989 to only 23.8 percent in 1994. There has been a modest increase in the proportion of students using inhalants, from 3.2 percent to 6.4 percent (See Tables 30 & 31).

Table 30. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Summit Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	35.8	23.8	-12.0*
Cigarettes	14.1	12.5	-1.6
Marijuana	9.5	10.5	+1.0
Amphetamines	3.7	5.1	+1.4
Barbiturates	1.9	2.1	+0.2
Tranquilizers	2.2	2.4	+0.2
Cocaine	1.6	2.8	+1.2
Heroin	0.4	1.1	+0.7
Inhalants	3.2	6.4	+3.2*
Hallucinogens	3.0	5.5	+2.5
Pain Medications	7.3	9.4	+2.1
Sample Size	921	749	

*p <.01 (Significantly different than comparable 1989 data).

Table 31. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Summit Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	13.9	27.4	34.8	23.8
5 Drinks*	6.0	15.5	20.4	12.9
Smokeless Tobacco	6.6	6.2	18.7	9.9
Cigarettes	5.7	16.8	18.4	12.5
Marijuana	4.1	11.1	19.9	10.5
Amphetamines	2.2	7.1	7.3	5.1
Barbiturates	0.9	3.1	2.9	2.1
Tranquilizers	1.0	3.5	3.4	2.4
Cocaine	2.2	3.1	3.4	2.8
Heroin	1.3	1.3	0.5	1.1
Inhalants	5.7	8.8	4.9	6.4
Hallucinogens	1.9	5.3	11.4	5.5
Pain Medications	4.1	15.0	11.3	9.4
Sample Size	316	226	207	749

*Had 5 or more drinks in a row within the past two weeks.

Central

The Central planning district (Juab, Millard, Piute, Sanpete, Sevier, and Wayne counties) has relatively high rates of problem drinking, cigarette smoking, and smokeless tobacco use. Thirteen percent of the students report having had five or more drinks in a row during the past two weeks, compared to only 7.9 percent for Utah as a whole. A comparison of the 1989 and 1994 data shows increases in the use of alcohol, cigarettes, marijuana, and amphetamines (See Tables 32 & 33).

Table 32. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Central Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	15.9	21.9	+6.0*
Cigarettes	8.5	18.5	+10.0*
Marijuana	4.0	8.3	+4.3*
Amphetamines	2.9	7.5	+4.6*
Barbiturates	1.4	4.5	+3.1
Tranquilizers	1.0	2.7	+1.7
Cocaine	0.8	3.0	+2.2
Heroin	0.3	1.1	+0.8
Inhalants	3.5	6.0	+2.5
Hallucinogens	0.6	3.9	+3.3
Pain Medications	7.7	9.0	+1.3
Sample Size	3512	764	

*p <.01 (Significantly different than comparable 1989 data).

Table 33. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Central Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	12.5	26.4	27.4	21.9
5 Drinks*	4.8	16.8	18.3	13.1
Smokeless Tobacco	6.1	12.6	17.7	11.8
Cigarettes	10.2	19.2	27.4	18.5
Marijuana	2.0	9.1	14.7	8.3
Amphetamines	3.8	8.7	10.4	7.5
Barbiturates	2.8	5.3	5.5	4.5
Tranquilizers	1.8	1.9	4.9	2.7
Cocaine	0.5	3.8	4.9	3.0
Heroin	0.5	0.5	2.5	1.1
Inhalants	7.1	6.3	4.3	6.0
Hallucinogens	1.5	3.8	6.7	3.9
Pain Medications	7.1	6.7	14.0	9.0
Sample Size	392	208	164	764

*Had 5 or more drinks in a row within the past two weeks.

Southwest

The Southwest planning district (Beaver, Garfield, Iron, Kane, and Washington counties) has usage rates similar to state averages, except 8.6 percent of the students use smokeless tobacco compared to only 5.3 percent for the state. A comparison of 1989 and 1994 data reveals no major changes in the proportion of users, although there have been modest increases in the use of tobacco and marijuana (See Tables 34 & 35).

Table 34. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Southwest Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	18.2	18.7	+0.5
Cigarettes	10.5	14.3	+3.8
Marijuana	4.7	7.8	+3.1
Amphetamines	2.8	5.7	+2.9
Barbiturates	1.4	3.0	+1.6
Tranquilizers	1.1	2.6	+1.5
Cocaine	1.6	2.5	+0.9
Heroin	0.6	1.5	+0.9
Inhalants	4.9	5.8	+0.9
Hallucinogens	1.4	2.7	+1.3
Pain Medications	6.1	7.1	+1.0
Sample Size	2584	2478	

*p <.01 (Significantly different than comparable 1989 data).

Table 35. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Southwest Planning District, 1994

Drug	7-8	9-10	11-12	Total
Alcohol	14.3	18.3	23.7	18.7
5 Drinks*	5.9	8.3	11.3	8.5
Smokeless Tobacco	6.1	9.1	10.6	8.6
Cigarettes	10.6	16.1	16.7	14.3
Marijuana	5.0	9.6	9.2	7.8
Amphetamines	4.9	6.0	6.2	5.7
Barbiturates	3.3	3.6	2.3	3.0
Tranquilizers	3.2	2.3	2.2	2.6
Cocaine	2.9	2.7	1.9	2.5
Heroin	1.6	1.4	1.5	1.5
Inhalants	7.3	6.0	4.0	5.8
Hallucinogens	2.8	2.8	2.7	2.7
Pain Medications	5.5	8.5	7.6	7.1
Sample Size	878	760	840	2478

*Had 5 or more drinks in a row within the past two weeks.

Uintah

The Uintah planning district (Daggett, Uintah, and Duchesne counties) is similar to the state except it is above average in the use of alcohol and tobacco. Ten percent of the students use smokeless tobacco compared to five percent for the state. For cigarettes, the comparable percentages are 18 and 12, respectively. The Uintah district had little change from 1989 to 1994, except for a 6 percent increase in cigarette use (See Tables 36 & 37).

Table 36. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Uintah Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	24.1	23.5	-0.6
Cigarettes	12.2	18.3	+6.1*
Marijuana	7.1	6.1	-1.0
Amphetamines	4.5	5.0	+0.5
Barbiturates	2.2	2.8	+0.6
Tranquilizers	1.5	1.5	0.0
Cocaine	1.5	1.6	+0.1
Heroin	0.6	0.7	+0.1
Inhalants	6.3	4.5	-1.8
Hallucinogens	1.3	2.5	+1.2
Pain Medications	10.4	7.0	-3.4
Sample Size	1187	820	

*p <.01 (Significantly different than comparable 1989 data).

Table 37. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Uintah Planning District, 1994

Drug	7-8	9-10	11-12	Total
Alcohol	17.9	22.6	30.9	23.5
5 Drinks*	7.1	11.1	16.6	11.3
Smokeless Tobacco	7.4	9.0	15.2	10.4
Cigarettes	14.7	17.3	23.5	18.3
Marijuana	2.9	6.6	9.5	6.1
Amphetamines	3.6	6.1	5.7	5.0
Barbiturates	2.3	3.3	3.0	2.8
Tranquilizers	1.3	1.2	1.9	1.5
Cocaine	1.6	2.5	0.8	1.6
Heroin	0.3	1.2	0.8	0.7
Inhalants	5.2	5.7	2.7	4.5
Hallucinogens	1.6	2.9	3.1	2.5
Pain Medications	6.5	5.8	8.7	7.0
Sample Size	312	243	265	820

*Had 5 or more drinks in a row within the past two weeks.

Four Corners

The Four Corners planning district (Carbon, Emery, and Grand counties) is above average in the proportion who use alcohol, heroin, inhalants, cigarettes, marijuana, and pain medications. There have been significant increases in the use of cigarettes, marijuana, and inhalants; marijuana use jumped from 6.4 percent in 1989 to 12.2 percent in 1994 (See Tables 38 & 39).

Table 38. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: Four Corners Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	33.5	31.1	-2.4
Cigarettes	12.1	17.2	+5.1*
Marijuana	6.4	12.2	+5.8*
Amphetamines	4.8	6.7	+1.9
Barbiturates	2.0	5.1	+3.1
Tranquilizers	2.0	2.8	+0.8
Cocaine	2.3	2.6	+0.3
Heroin	0.6	2.0	+1.4
Inhalants	5.4	10.1	+4.7*
Hallucinogens	1.3	3.7	+2.4
Pain Medications	9.7	10.5	+0.8
Sample Size	1792	505	

*p <.01 (Significantly different than comparable 1989 data)

Table 39. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: Four Corners Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	23.9	40.4	28.7	31.1
5 Drinks*	11.4	16.2	13.3	13.6
Smokeless Tobacco	8.2	8.9	4.9	7.5
Cigarettes	14.7	23.6	12.6	17.2
Marijuana	10.3	14.0	12.6	12.2
Amphetamines	8.7	7.8	2.8	6.7
Barbiturates	4.9	8.4	1.4	5.1
Tranquilizers	4.3	3.4	0.0	2.8
Cocaine	2.7	2.8	2.1	2.6
Heroin	2.7	2.2	0.7	2.0
Inhalants	9.8	16.2	2.8	10.1
Hallucinogens	3.8	5.6	1.4	3.7
Pain Medications	10.3	15.1	4.9	10.5
Sample Size	184	178	143	505

*Had 5 or more drinks in a row within the past two weeks.

San Juan

San Juan County has rates similar to the rest of the state, except alcohol and tobacco use are higher. Nineteen percent of the students smoke cigarettes compared to 12 percent for Utah as a whole. Since 1989, there has been a 6.8 percent increase in cigarette users, and a 6.9 percent decrease in students using hallucinogens (See Tables 40 & 41).

Table 40. Change in Percent of 7-12 Grade Students Who Reported Using Various Drugs During Past Month: San Juan Planning District, 1994

<u>Drug</u>	<u>1989</u>	<u>1994</u>	<u>Change</u>
Alcohol	15.8	18.4	+2.6
Cigarettes	12.4	19.2	+6.8*
Marijuana	6.8	9.5	+2.7
Amphetamines	3.0	5.3	+2.3
Barbiturates	1.0	3.9	+2.9
Tranquilizers	2.0	1.9	-0.1
Cocaine	2.4	1.8	-0.6
Heroin	1.3	1.6	+0.3
Inhalants	5.2	5.0	-0.2
Hallucinogens	12.2	5.3	-6.9*
Pain Medications	8.3	9.1	+0.8
Sample Size	908	387	

*p <.01 (Significantly different than comparable 1989 data).

Table 41. Percent of Students Who Reported Using Various Drugs During Past Month by Grade: San Juan Planning District, 1994

<u>Drug</u>	<u>7-8</u>	<u>9-10</u>	<u>11-12</u>	<u>Total</u>
Alcohol	10.3	22.2	18.9	18.4
5 Drinks*	8.4	13.2	10.8	11.5
Smokeless Tobacco	9.7	12.5	13.5	12.1
Cigarettes	16.2	18.9	23.0	19.2
Marijuana	7.1	10.6	9.5	9.5
Amphetamines	1.9	6.3	6.8	5.3
Barbiturates	2.6	4.4	4.1	3.9
Tranquilizers	0.0	1.9	4.1	1.9
Cocaine	0.6	1.3	4.1	1.8
Heroin	0.0	1.9	2.7	1.6
Inhalants	3.2	5.0	6.8	5.0
Hallucinogens	5.8	5.0	5.4	5.3
Pain Medications	9.1	7.5	12.5	9.1
Sample Size	155	158	74	387

*Had 5 or more drinks in a row within the past two weeks.

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APPENDIX I
QUESTIONNAIRE

SCHOOL SURVEY OF ALCOHOL AND DRUG NON-USE,
EXPERIMENTATION, AND USE: 1994

Utah State Division of Substance Abuse
Utah State Office of Education

In this study you are asked about alcohol, drugs, and some of your attitudes toward family, friends, school, and community. DO NOT put your name on the answer sheet and mark ONLY ONE answer for each question. No one will know what answers you mark and your participation is voluntary. If there is any question you do not want to answer, just leave it blank.

BACKGROUND INFORMATION

1. How old are you?
 - A. 12 or younger
 - B. 13
 - C. 14
 - D. 15
 - E. 16
 - F. 17
 - G. 18 or older
2. What grade are you in?
 - A. 7th
 - B. 8th
 - C. 9th
 - D. 10th
 - E. 11th
 - F. 12th
3. Are you:
 - A. Female
 - B. Male
4. How do you describe yourself?
 - A. African-American or Black
 - B. American Indian or Native American
 - C. Asian or Asian American
 - D. Hispanic or Latino
 - E. Pacific Islander
 - F. White or Anglo-American
 - G. Other
5. Do you live with your. . .
 - A. Mother and father
 - B. Mother only
 - C. Mother and stepfather
 - D. Father only
 - E. Father and stepmother
 - F. Other
6. How many brothers and sisters do you have?
 - A. None
 - B. 1
 - C. 2
 - D. 3
 - E. 4
 - F. 5
 - G. 6 or more
9. If you have ever smoked a cigarette, when was the last time?
 - A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the past 30 days
10. During the last 30 days, how many cigarettes did you smoke per day?
 - A. None
 - B. 1-5 cigarettes
 - C. 6-10 cigarettes
 - D. 11-20 cigarettes
 - E. 21 or more cigarettes

ALCOHOL (BEER, WINE, WINE COOLERS, AND LIQUOR)

11. If you have ever had beer, wine, wine coolers, or liquor to drink, when was the last time?
 - A. Never
 - B. More than 12 months
 - C. 1-12 months ago
 - D. Within the past month
12. On how many of the last 30 days did you have beer, wine, wine coolers, or liquor to drink?
 - A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day
13. When you drink alcohol, about how many drinks do you usually have? (A drink is one bottle, can, glass, or mixed drink.)
 - A. None
 - B. Less than 1 drink
 - C. 1-2 drinks
 - D. 3-5 drinks
 - E. 6-8 drinks
 - F. 9 or more drinks
14. During the last 30 days, what is the most alcohol you had to drink on any one day?
 - A. None
 - B. Less than 1 drink
 - C. 1-2 drinks
 - D. 3-5 drinks
 - E. 6-8 drinks
 - F. 9 or more drinks
15. Think back over the last two weeks. How many times have you had five or more drinks in a row?
 - A. None
 - B. Once
 - C. Twice
 - D. 3-5 times
 - E. 6-8 times
 - F. 9 or more times

TOBACCO

7. If you have ever used chewing tobacco, snuff, or other smokeless tobacco, when was the last time?
 - A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the past 30 days
8. On how many of the last 30 days did you use chewing tobacco, snuff, or other smokeless tobacco?
 - A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

16. If you had alcohol during the last 30 days, where did you usually get it? (Choose only one).
 - A. I have not had any alcohol
 - B. From a friend
 - C. From a brother or sister
 - D. From my parents
 - E. From other relatives
 - F. From a store
 - G. From my home
 - H. Other
17. Have you ever been riding in a car when the driver was under the influence of alcohol?
 - A. No
 - B. Yes, but more than a month ago
 - C. Yes, within the past month
18. During the last 30 days, how many times did you drive after having had 4 or more drinks of alcohol within one hour?
 - A. Never
 - B. 1 or 2 times
 - C. 3-6 times
 - D. 7 or more times
19. Have you ever gone to an alcohol treatment center, clinic, doctor, or counselor to receive help for an alcohol problem?
 - A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days

MARIJUANA ("GRASS" OR "POT") AND HASHISH ("HASH" OR "HASH OIL")

20. If you have ever used marijuana or hashish, when was the last time?
 - A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the past 30 days
21. On how many of the last 30 days did you use marijuana or hashish?
 - A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day
22. During the last 30 days, about how many marijuana cigarettes did you smoke a day, on the average? (If you shared them with others, count only what you smoked.)
 - A. None
 - B. Less than 1 a day
 - C. 1 a day
 - D. 2-3 a day
 - E. 4-6 a day
 - F. 7 or more a day
23. If you used marijuana during the last 30 days, where did you usually get it? (Choose only one.)
 - A. I have not used any marijuana
 - B. From a friend
 - C. From a brother or sister
 - D. From my parents
 - E. From other relatives
 - F. From a drug dealer
 - G. Other

AMPHETAMINES

DOCTORS MAY PRESCRIBE AMPHETAMINES TO HELP PEOPLE LOSE WEIGHT OR FOR OTHER REASONS. AMPHETAMINES ARE SOMETIMES CALLED "SPEED," "UPPERS," "METH," OR "PEP PILLS."

24. If you have ever taken amphetamines without a doctor telling you to take them, when was the last time?
 - A. Never
 - B. More than a year ago
 - C. 1-12 months ago
 - D. Within the past 30 days
25. On how many of the last 30 days did you take amphetamines without a doctor telling you to take them?
 - A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

BARBITURATES AND OTHER SEDATIVES DOCTORS MAY PRESCRIBE BARBITURATES TO HELP PEOPLE RELAX OR GET TO SLEEP. BARBITURATES ARE SOMETIMES CALLED "DOWNERS," "GOOFBALLS," OR "RAINBOWS."

26. If you have ever used barbiturates or sedatives without a doctor telling you to take them, when was the last time?
 - A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days
27. On how many of the last 30 days did you take barbiturates or sedatives without a doctor telling you to take them?
 - A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

TRANQUILIZERS

DOCTORS SOMETIMES PRESCRIBE TRANQUILIZERS TO CALM PEOPLE DOWN, QUIET THEIR NERVES, OR RELAX THEIR MUSCLES. COMMON TRANQUILIZERS ARE LIBRIUM, VALIUM, AND XANAX.

28. If you have ever used tranquilizers without a doctor telling you to take them, when was the last time?
 - A. Never
 - B. More than a year ago
 - C. 1-12 months ago
 - D. Within the last 30 days
29. On how many of the last 30 days did you take tranquilizers without a doctor telling you to take them?
 - A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

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PRESCRIPTION PAIN MEDICATIONS

DOCTORS AND DENTISTS SOMETIMES PRESCRIBE DRUGS TO REDUCE PAIN, SUCH AS MORPHINE, DEMEROL, AND CODEINE. IN YOUR ANSWERS, DO NOT INCLUDE ANY NON-PRESCRIPTION DRUGS SUCH AS ASPIRIN OR TYLENOL.

30. If you have ever used prescription pain medications without a doctor telling you to take them, when was the last time?
- A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days
31. On how many of the last 30 days did you use prescription pain medications without a doctor telling you to take them?
- A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

COCAINE ("COKE") AND CRACK (CHUNKS OR ROCKS OF COCAINE)

32. If you have ever used cocaine or crack, when was the last time?
- A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days
33. On how many of the last 30 days did you use cocaine or crack?
- A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

HEROIN ("SMACK," "HORSE," OR "SKAGG")

34. If you have ever used heroin, when was the last time?
- A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days
35. On how many of the last 30 days did you use heroin?
- A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

INHALANTS ARE GASSES OR SPRAYS PEOPLE SNIFF OR BREATHE TO GET HIGH, SUCH AS GLUE AND AEROSOL SPRAYS.

36. If you have ever used inhalants, when was the last time you deliberately used them?
- A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days
37. On how many of the last 30 days did you deliberately use inhalants?
- A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day

HALLUCINOGENS OR PSYCHEDELIC DRUGS (SUCH AS LSD, PCP, AND PEYOTE)

38. If you have ever used a hallucinogen such as LSD, PCP, or peyote, when was the last time?
- A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days
39. On how many of the last 30 days did you use a hallucinogen such as LSD, PCP, or peyote?
- A. None
 - B. 1-3 days
 - C. 4-7 days
 - D. 8-12 days
 - E. 13-20 days
 - F. 21-29 days
 - G. Every day
40. Have you ever gone to a drug treatment center, clinic, medical doctor, crisis center, or counselor to receive help for a drug problem?
- A. Never
 - B. More than 12 months ago
 - C. 1-12 months ago
 - D. Within the last 30 days
41. If you wanted to get some alcohol, how easy would it be for you to get some?
- A. Very difficult
 - B. Somewhat difficult
 - C. Somewhat easy
 - D. Very easy
42. If you wanted to get an illegal drug such as marijuana or cocaine, how easy would it be for you to get some?
- A. Very difficult
 - B. Somewhat difficult
 - C. Somewhat easy
 - D. Very easy

BACKGROUND QUESTIONS

43. How much schooling did your mother complete?
- A. Grade school or less
 - B. Some high school
 - C. Completed high school
 - D. Some college
 - E. Completed college
 - F. Graduate or professional school after college
 - G. I don't know or does not apply
44. How much schooling did your father complete?
- A. Grade school or less
 - B. Some high school
 - C. Completed high school
 - D. Some college
 - E. Completed college
 - F. Graduate or professional school after college
 - G. I don't know or does not apply
45. How often do you attend religious services at a church or synagogue?
- A. Never
 - B. Rarely
 - C. Once or twice a month
 - D. About once a week or more
46. How important is religion in your life?
- A. Not important
 - B. Somewhat important
 - C. Pretty important
 - D. Very important
47. Do any of your brothers or sisters drink alcohol?
- A. No
 - B. Yes
 - C. I have no brothers or sisters

48. Do any of your brothers or sisters smoke cigarettes?
A. No
B. Yes
C. I have no brothers or sisters

49. Does your mother or father smoke cigarettes?
A. No
B. Yes

50. Does your mother or father drink alcohol?
A. No
B. Yes

51. Have any of your brothers or sisters smoked marijuana or taken other illegal drugs?
A. No
B. Yes
C. I have no brothers or sisters

52. Do you think a person in your family might have a problem with alcohol?
A. No
B. Yes, a moderate problem
C. Yes, a big problem

53. Do you think a person in your family might have a problem with drug use?
A. No
B. Yes, a moderate problem
C. Yes, a big problem

SCHOOL

54. Do you try hard to do good work in school.
A. NO, not at all
B. no, not usually
C. yes, usually
D. YES, almost always

55. Is it important to you to get good grades?
A. NO, not at all important
B. no, not very important
C. yes, somewhat important
D. YES, very important

56. Do you want to go to college?
A. NO, definitely not
B. no, probably not
C. yes, probably
D. YES, definitely

57. Are your school grades better than the grades of most students in your classes?
A. NO, they are much worse
B. no, they are a little worse
C. yes, they are a little better
D. YES, they are much better

CHANGE DURING PAST YEAR

58. Have you changed schools during the past year?
A. No
B. Yes

59. Have you changed homes in the past year?
A. No
B. Yes

60. In the past year did your parents get divorced or separated?
A. No
B. Yes

61. In the past year did a new adult start living with your family?
A. No
B. Yes

IN THE NEXT QUESTIONS MARK "NO!" IF YOU STRONGLY DISAGREE OR "no" IF YOU DISAGREE BUT NOT STRONGLY. SIMILARLY, MARK "yes" IF YOU AGREE AND "YES!" IF YOU STRONGLY AGREE.

YOUR CURRENT FAMILY

- | | <u>NO!</u> | <u>no</u> | <u>yes</u> | <u>YES!</u> |
|---|------------|-----------|------------|-------------|
| 62. Is there a lot of fighting in your family? | A | B | C | D |
| 63. Do people in your family sometimes get so angry that they throw things? | A | B | C | D |
| 64. Do people in your family sometimes hit each other when they are mad. | A | B | C | D |
| 65. Do you feel very close to your mother? | A | B | C | D |
| 66. Do you enjoy spending time with your mother? | A | B | C | D |
| 67. Do you share your thoughts and feelings with your mother? | A | B | C | D |
| 68. Would you like to be the kind of person your mother is? | A | B | C | D |
| 69. Do you feel very close to your father? | A | B | C | D |
| 70. Do you enjoy spending time with your father? | A | B | C | D |
| 71. Do you share your thoughts and feelings with your father? | A | B | C | D |
| 72. Would you like to be the kind of person your father is? | A | B | C | D |
| 73. If you had a personal problem, could you ask your mom or dad for help? | A | B | C | D |
| 74. Do your parents want you to call if you are going to be late getting home? | A | B | C | D |
| 75. When you are not at home, does one of your parents usually know where you are and who you are with? | A | B | C | D |

FRIENDS

- | | <u>Number of best friends</u> | | | | |
|--|-------------------------------|----------|----------|----------|------------------|
| | <u>0</u> | <u>1</u> | <u>2</u> | <u>3</u> | <u>4 or More</u> |
| 76. How many of your best friends drink beer, wine, or liquor regularly? | A | B | C | D | E |
| 77. How many of your best friends use tobacco regularly? | A | B | C | D | E |
| 78. How many of your best friends have tried marijuana? | A | B | C | D | E |
| 79. How many of your best friends have used other illegal drugs? | A | B | C | D | E |

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YOUR NEIGHBORHOOD

	<u>NO!</u>	<u>no</u>	<u>yes</u>	<u>YES!</u>
80. Would you like to move out of your neighborhood?	A	B	C	D

81. If you had to move, would you miss the neighborhood you now live in?	A	B	C	D
--	---	---	---	---

82. Does your neighborhood have crime or drug selling?	A	B	C	D
--	---	---	---	---

OPINION QUESTIONS

	<u>NO!</u>	<u>no</u>	<u>yes</u>	<u>YES!</u>
83. Do you think it is okay to cheat in school in order to pass a difficult test?	A	B	C	D

84. If you don't get caught, do you think it is okay to take something from a store?	A	B	C	D
--	---	---	---	---

85. Is it important to be honest with your parents, even if they become upset and punish you.	A	B	C	D
---	---	---	---	---

86. Do you think it hurts someone to smoke one or more packs of cigarettes per day?	A	B	C	D
---	---	---	---	---

87. Do you think it hurts someone to have one or two drinks of alcohol nearly every day?	A	B	C	D
--	---	---	---	---

88. Do you think it hurts someone to smoke marijuana regularly?	A	B	C	D
---	---	---	---	---

IF YOU HAVE EVER USED ALCOHOL, TOBACCO, OR ANY OTHER DRUGS, HOW OLD WERE YOU WHEN YOU FIRST TRIED EACH OF THEM? DON'T COUNT ANYTHING YOU TOOK BECAUSE A DOCTOR TOLD YOU TO.

WHAT WAS YOUR AGE WHEN YOU FIRST...

	Never <u>Tried</u>	12 or <u>Less</u>	13	14	15	16	17 or <u>More</u>
89. Smoked a cigarette	A	B	C	D	E	F	G

90. Drank beer, wine, or liquor - more than a few sips.	A	B	C	D	E	F	G
---	---	---	---	---	---	---	---

91. Tried marijuana	A	B	C	D	E	F	G
---------------------	---	---	---	---	---	---	---

92. Tried amphetamines	A	B	C	D	E	F	G
------------------------	---	---	---	---	---	---	---

93. Tried cocaine	A	B	C	D	E	F	G
-------------------	---	---	---	---	---	---	---

IF YOU USE ALCOHOL OR OTHER DRUGS, HAS YOUR USE CAUSED YOU A PROBLEM WITH...

	I do not use alcohol or drugs	<u>NO!</u>	<u>no</u>	<u>yes</u>	<u>YES!</u>
--	-------------------------------------	------------	-----------	------------	-------------

94. Your school grades	A	B	C	D	E
------------------------	---	---	---	---	---

95. Your relationship with your friends	A	B	C	D	E
---	---	---	---	---	---

96. Your relationship with your parents	A	B	C	D	E
---	---	---	---	---	---

97. The police	A	B	C	D	E
----------------	---	---	---	---	---

THAT IS ALL OF THE QUESTIONS. THANK YOU!

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APPENDIX II
LETTER TO SCHOOL DISTRICTS



UTAH STATE OFFICE
OF EDUCATION
250 East Fifth South
Salt Lake City, Utah 84111

Scott W. Bean,
State Superintendent
of Public Instruction

April 12, 1994

Steven C. Baugh, Superintendent
Alpine School District
575 North 100 East
American Fork UT 84003

Dear Superintendent Baugh:

As part of an ongoing effort to implement effective substance abuse prevention education programs in Utah's schools, some schools in your district will have the opportunity to be involved in a statewide "Survey of Alcohol and Drug Non-use, Experimentation, and Use" to be conducted throughout the state during the first part of May. The survey is a cooperative effort between the local school districts, the Utah State Office of Education, and the Utah State Division of Substance Abuse and will target students in grades 7-12. The project is funded with a grant from the State Division of Substance Abuse.

**The Utah State Board of
Education Utah State Board for
Applied Technology Education**

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The Project Coordinator is Dr. Stephen Bahr, Professor of Sociology at Brigham Young University. Dr. Bahr conducted the 1984 and 1989 school surveys and is both familiar with, and sensitive to, the needs of Utah's schools. As in past surveys, the results will be anonymous and individual district data will be released only to the appropriate district superintendent. Aggregate results will be reported statewide and by local substance abuse authority planning districts.

This year's questionnaire will be similar to the one used in the 1989 school survey except a few additional items measuring risk factors will be included. The questionnaire is in the process of being reviewed and approved by EDACC here at the State Office of Education.

This year's survey will not require as large a sampling as the 1989 survey, therefore, the time districts will need to devote to this project will be minimal.

Participation in the survey will provide the following significant benefits for your district.

- Information which describes the current nature and extent of alcohol, tobacco and other drug use among students (information required for Federal Drug-Free Schools funding during FY 94 and subsequent years).
- Data to utilize in evaluating the effectiveness of substance abuse prevention education efforts in your schools over the past 10 years (comparison with 1984 and 1989 survey data) and for planning future programs; and
- An indicator of need to be utilized by the State Division of Substance Abuse in allocating funds to local substance abuse authorities for prevention, early intervention, and treatment services.

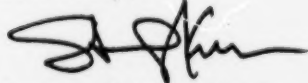
Voice: (801) 538-7500
TDD: (801) 538-7876



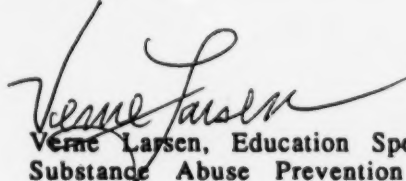
Due to the lateness of the grant award received by the Division, it has put us near the end of the school year. We feel strongly, however, that the information which the survey will provide is very important to the continual success of our state's substance abuse prevention efforts. We therefore urge you to be supportive of the upcoming survey. Participation by representative schools in each district is crucial to our continual success.

Dr. Bahr has been given a list of the Drug-Free School Coordinators in each district as a contact person to help support this project. Dr. Bahr will be in touch with the Drug-Free School Coordinator to schedule a time to work out the individual sampling plan for your district. Please call if you have concerns or questions with the project. Thanks for your district's efforts in substance abuse prevention efforts. We hope this project will contribute to your future successes.

Sincerely,



Stevan Kukic, Director
Services for At Risk Students



Verne Larsen, Education Specialist
Substance Abuse Prevention Programs

VL/gs

Enclosure

cc: Drug-Free School Coordinator
✓ Dr. Stephen Bahr, BYU
Leon PoVey, Division of Substance Abuse

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APPENDIX III
LETTERS TO PRINCIPALS, TEACHERS, AND PARENTS

DEPARTMENT OF SOCIOLOGY
BRIGHAM YOUNG UNIVERSITY
800 SPENCER W. KIMBALL TOWER
PO BOX 25547
PROVO, UTAH 84602-5547
(801) 378-3392 / FAX: (801) 378-5978



May 5, 1994

Dear Principal:

I am pleased that your school is participating in the 1994 survey of drug use among Utah students in grades 7-12. As my assistants mentioned on the phone, it is important that the classes to be surveyed are chosen randomly, as they will represent all the students in their grade level.

Based on the information you gave us, we have prepared a packet for each class to be included in the survey. Each packet contains an instruction sheet for the teacher, questionnaires, answer sheets, and a return envelope. The students will need to have #2 pencils to mark the answer sheets. To insure uniformity in administration, each teacher should read the instruction sheet to the students before passing out the questionnaires. After a class completes the survey, the teacher needs to place the completed answer sheets in the return envelope and mail it. For statistical purposes, it is important that the answer sheets for each class are mailed separately. The questionnaires may be discarded.

On the back of this letter I have included a brief information sheet about the survey. I appreciate your cooperation in conducting the survey in your school. By providing packets and return envelopes, I have tried to make it easy for you and the teachers to administer the survey. If you have any questions or problems, please call me at 378-6710. Thank you!

Sincerely,

A handwritten signature in cursive script, reading "Stephen J. Bahr".

Stephen J. Bahr, Ph.D.
Professor

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INSTRUCTIONS FOR TEACHERS

PLEASE READ ALOUD TO STUDENTS BEFORE HANDING OUT THE SURVEY

Today we would like each of you to answer the questions in this booklet (HOLD UP QUESTIONNAIRE). For each question, fill in the appropriate circle on the answer sheet (HOLD UP ANSWER SHEET). Please use a #2 pencil.

There are no right or wrong answers, except what is true about you. If you cannot answer a question truthfully, please leave it blank. This survey is being conducted by the Utah State Office of Education. The information will be used to improve drug education and prevention efforts.

Because this is a standard answer sheet which is sometimes used for student tests, it has a place for a name. However, DO NOT put your name or any other identifying information on the answer sheet. Only mark your answer for each question. Your answers will be anonymous, which means no one will know how you answer the questions.

Your participation is voluntary. If there is any question you do not want to answer, just leave it blank.

May 1994

Dear Parents:

A survey to estimate rates of drug use among secondary students is being conducted by the Utah State Office of Education. It is part of the ongoing effort to implement and evaluate substance abuse prevention programs in Utah schools. The survey is a cooperative effort of local school districts, the Utah State Office of Education, and the Utah State Division of Substance Abuse. A similar survey was conducted in 1984 and 1989.

Students in a random sample of classrooms will be given a questionnaire which takes about 20 minutes to complete. The results will be anonymous and participation by students is voluntary. One of your child's classrooms was chosen to be in the survey. If the survey is to be accurate, it is important that all students in each class be given the opportunity to participate. The benefits of the survey are that it will help schools evaluate drug prevention programs and provide information to plan future drug prevention efforts. There is no known risk to students who complete the questionnaire.

If you desire to examine the questionnaire, a copy is available in your principal's office. If you have any questions about the survey you may contact the project director, Dr. Stephen Bahr, at 378-6710 (820 SWKT, Brigham Young University, Provo, Utah 84602). If you have any questions regarding the rights of you or your children as participants in a research project, you may contact Dr. Millene F. Murphy, Chair of the Institutional Review Board, 460 SWKT, Brigham Young University, Provo, Utah 84602; phone 378-7191.

If you **DO NOT** want your child to complete the questionnaire, please inform the principal of your child's school. Thank you!

Sincerely,

Stephen J. Bahr, Ph.D.
Project Director

BEST COPY AVAILABLE

APPENDIX IV
FREQUENCIES OF ALL QUESTIONNAIRE ITEMS

**Frequencies of 1994 Utah School Drug Survey
Grades 7-12 (Weighted)**

	<u>FREQUENCY</u>	<u>PERCENT</u>
1. HOW OLD ARE YOU?		
12 or younger	632	4.0
13	2898	18.3
14	2667	16.8
15	2467	15.6
16	2887	18.2
17	2665	16.8
18 or older	1643	10.4
2. WHAT GRADE ARE YOUR IN?		
7th	2989	18.9
8th	2717	17.2
9th	2359	14.9
10th	2611	16.5
11th	2618	16.5
12th	2530	16.0
3. ARE YOU:		
Female	8117	51.5
Male	7643	48.5
4. HOW DO YOU DESCRIBE YOURSELF?		
African-American	164	1.0
American Indian	636	4.1
Asian	289	1.8
Hispanic or Latino	593	3.8
Pacific Islander	175	1.1
White	12950	82.5
Other	881	5.6
5. DO YOU LIVE WITH YOUR. . .		
Mother and father	11769	74.4
Mother only	1434	9.1
Mother and stepfather	1357	8.6
Father only	322	2.0
Father and stepmother	373	2.4
Other	558	3.5
6. HOW MANY BROTHERS AND SISTERS DO YOU HAVE?		
None	495	3.1
1	1996	12.6
2	2659	16.8
3	3305	20.9
4	2697	17.0
5	1813	11.5
6 or more	2867	18.1

	<u>FREQUENCY</u>	<u>PERCENT</u>
7. IF YOU HAVE EVER USED CHEWING TOBACCO, SNUFF, OR OTHER SMOKELESS TOBACCO, WHEN WAS THE LAST TIME?		
Never	13903	87.8
More than 12 months ago	589	3.7
1-12 months ago	625	3.9
Within the past 30 days	718	4.5
8. ON HOW MANY OF THE LAST 30 DAYS DID YOU USE CHEWING TOBACCO, SNUFF, OR OTHER SMOKELESS TOBACCO?		
None	14976	94.6
1-3 days	336	2.1
4-7 days	105	0.7
8-12 days	73	0.5
13-20 days	62	0.4
21-29 days	78	0.5
Every day	192	1.2
9. IF YOU HAVE EVER SMOKED A CIGARETTE, WHEN WAS THE LAST TIME?		
Never	11264	71.2
More than 12 months ago	1648	10.4
1-12 months ago	1153	7.3
Within the past 30 days	1756	11.1
10. DURING THE LAST 30 DAYS, ABOUT HOW MANY CIGARETTES DID YOU SMOKE A DAY?		
None	13847	87.5
1-5 cigarettes	1288	8.1
6-10 cigarettes	320	2.0
11-20 cigarettes	172	1.1
21 or more cigarettes	194	1.2
11. IF YOU HAVE EVER HAD BEER, WINE, WINE COOLERS, OR LIQUOR TO DRINK, WHEN WAS THE LAST TIME?		
Never	9751	61.6
More than 12 months	1536	9.7
1-12 months ago	2062	13.0
Within the past month	2470	15.6

	<u>FREQUENCY</u>	<u>PERCENT</u>
12. ON HOW MANY OF THE LAST 30 DAYS DID YOU HAVE BEER, WINE, WINE COOLERS OR LIQUOR TO DRINK?		
None	12882	81.4
1-3 days	1598	10.1
4-7 days	538	3.4
8-12 days	334	2.1
13-20 days	201	1.3
21-29 days	189	1.2
Every day	90	0.6
13. WHEN YOU DRINK ALCOHOL, ABOUT HOW MANY DRINKS DO YOU USUALLY HAVE? (A drink is one bottle, can, glass, or mixed drink)		
None	10642	67.2
Less than 1 drink	1559	9.8
1-2 drinks	1325	8.4
3-5 drinks	1126	7.1
6-8 drinks	641	4.0
9 or more drinks	534	3.4
14. DURING THE LAST 30 DAYS, WHAT IS THE MOST ALCOHOL YOU HAD TO DRINK ON ANY ONE DAY?		
None	12739	80.5
Less than 1 drink	749	4.7
1-2 drinks	701	4.4
3-5 drinks	639	4.0
6-8 drinks	384	2.4
9 or more drinks	615	3.9
15. THINK BACK OVER THE LAST TWO WEEKS. HOW MANY TIMES HAVE YOU HAD FIVE OR MORE DRINKS IN A ROW?		
None	14578	92.1
Once	509	3.2
Twice	353	2.2
3-5 times	224	1.4
6-8 times	71	.4
9 or more times	86	.5
16. IF YOU HAD ALCOHOL DURING THE LAST 30 DAYS, WHERE DID YOU USUALLY GET IT? (Choose only one).		
I have not had any alcohol	11667	79.3
From a friend	1538	10.4
From a brother or sister	133	.9
From my parents	294	2.0
From other relatives	136	.9
From a store	341	2.3
From my home	247	1.7
Other	364	2.5

	<u>FREQUENCY</u>	<u>PERCENT</u>
17. HAVE YOU EVER BEEN RIDING IN A CAR WHEN THE DRIVER WAS UNDER THE INFLUENCE OF ALCOHOL?		
No	11109	70.4
Yes, but more than a month ago	3344	21.2
Yes, within the past month	1335	8.5
18. DURING THE LAST 30 DAYS, HOW MANY TIMES DID YOU DRIVE AFTER HAVING HAD 4 OR MORE DRINKS OF ALCOHOL WITHIN ONE HOUR?		
Never	15365	97.2
1 or 2 times	320	2.0
3-6 times	59	.4
7 or more times	67	.4
19. HAVE YOU EVER GONE TO AN ALCOHOL TREATMENT CENTER, CLINIC, DOCTOR, OR COUNSELOR TO RECEIVE HELP FOR AN ALCOHOL PROBLEM?		
Never	14552	98.2
More than 12 months ago	103	.7
1-12 months ago	107	.7
Within the last 30 days	52	.4
20. IF YOU HAVE EVER USED MARIJUANA OR HASHISH, WHEN WAS THE LAST TIME?		
Never	13507	85.6
More than 12 months ago	450	2.9
1-12 months ago	792	5.0
Within the past 30 days	1039	6.6
21. ON HOW MANY OF THE LAST 30 DAYS DID YOU USE MARIJUANA OR HASHISH?		
None	14555	92.1
1-3 days	552	3.5
4-7 days	189	1.2
8-12 days	150	.9
13-20 days	128	.8
21-29 days	107	.7
Every day	131	.8
22. DURING THE LAST 30 DAYS, ABOUT HOW MANY MARIJUANA CIGARETTES DID YOU SMOKE A DAY, ON THE AVERAGE? (If you shared them with others, count only what you smoked.)		
None	14625	92.5
Less than 1 a day	521	3.3
1 a day	206	1.3
2-3 a day	281	1.8
4-6 a day	88	.6
7 or more a day	82	.5

	<u>FREQUENCY</u>	<u>PERCENT</u>
23. IF YOU USED MARIJUANA DURING THE LAST 30 DAYS, WHERE DID YOU USUALLY GET IT?		
I have not used any marijuana	13335	90.5
From a friend	858	5.8
From a brother or sister	58	.4
From my parents	54	.4
From other relatives	36	.2
From a drug dealer	262	1.8
Other	138	.9
24. IF YOU HAVE EVER TAKEN AMPHETAMINES WITHOUT A DOCTOR TELLING YOU TO TAKE THEM, WHEN WAS THE LAST TIME?		
Never	14174	89.8
More than a year ago	416	2.6
1-12 months ago	664	4.2
Within the past 30 days	538	3.4
25. ON HOW MANY OF THE LAST 30 DAYS DID YOU TAKE AMPHETAMINES WITHOUT A DOCTOR TELLING YOU TO TAKE THEM?		
None	14999	95.0
1-3 days	410	2.6
4-7 days	123	.8
8-12 days	86	.5
13-20 days	64	.4
21-29 days	47	.3
Every day	61	.4
26. IF YOU HAVE EVER USED BARBITURATES OR SEDATIVES WITHOUT A DOCTOR TELLING YOU TO TAKE THEM, WHEN WAS THE LAST TIME?		
Never	14969	94.9
More than 12 months ago	194	1.2
1-12 months ago	375	2.4
Within the last 30 days	243	1.5
27. ON HOW MANY OF THE LAST 30 DAYS DID YOU TAKE BARBITURATES OR SEDATIVES WITHOUT A DOCTOR TELLING YOU TO TAKE THEM?		
None	15332	97.2
1-3 days	223	1.4
4-7 days	74	.5
8-12 days	57	.4
13-20 days	24	.2
21-29 days	30	.2
Every day	37	.2

	<u>FREQUENCY</u>	<u>PERCENT</u>
28. IF YOU HAVE EVER USED TRANQUILIZERS WITHOUT A DOCTOR TELLING YOU TO TAKE THEM, WHEN WAS THE LAST TIME?		
Never	15178	96.2
More than 12 months ago	217	1.4
1-12 months ago	251	1.6
Within the last 30 days	126	.8
29. ON HOW MANY OF THE LAST 30 DAYS DID YOU TAKE TRANQUILIZERS WITHOUT A DOCTOR TELLING YOU TO TAKE THEM?		
None	15487	98.2
1-3 days	154	1.0
4-7 days	37	.2
8-12 days	39	.2
13-20 days	15	.1
21-29 days	12	.1
Every day	29	.2
30. IF YOU HAVE EVER USED PRESCRIPTION PAIN MEDICATIONS WITHOUT A DOCTOR TELLING YOU TO TAKE THEM, WHEN WAS THE LAST TIME?		
Never	13573	86.2
More than 12 months ago	517	3.3
1-12 months ago	1002	6.4
Within the last 30 days	660	4.2
31. ON HOW MANY OF THE LAST 30 DAYS DID YOU USE PRESCRIPTION PAIN MEDICATIONS WITHOUT A DOCTOR TELLING YOU TO TAKE THEM?		
None	14633	92.9
1-3 days	598	3.8
4-7 days	204	1.3
8-12 days	110	.7
13-20 days	67	.4
21-29 days	77	.5
Every day	61	.4
32. IF YOU HAVE EVER USED COCAINE OR CRACK, WHEN WAS THE LAST TIME?		
Never	15264	96.9
More than 12 months ago	140	.9
1-12 months ago	179	1.1
Within the last 30 days	173	1.1

	<u>FREQUENCY</u>	<u>PERCENT</u>
33. ON HOW MANY OF THE LAST 30 DAYS DID YOU USE COCAINE OR CRACK?		
None	15479	98.2
1-3 days	105	.7
4-7 days	34	.2
8-12 days	35	.2
13-20 days	33	.2
21-29 days	25	.2
Every day	52	.3
34. IF YOU HAVE EVER USED HEROIN, WHEN WAS THE LAST TIME?		
Never	15494	98.3
More than 12 months ago	87	.6
1-12 months ago	83	.5
Within the last 30 days	97	.6
35. ON HOW MANY OF THE LAST 30 DAYS DID YOU USE HEROIN?		
None	15589	99.0
1-3 days	46	.3
4-7 days	25	.2
8-12 days	26	.2
13-20 days	12	.1
21-29 days	9	.1
Every day	48	.3
36. IF YOU HAVE EVER USED INHALANTS, WHEN WAS THE LAST TIME YOU DELIBERATELY USED THEM?		
Never	13782	87.5
More than 12 months ago	731	4.6
1-12 months ago	694	4.4
Within the last 30 days	545	3.5
37. ON HOW MANY OF THE LAST 30 DAYS DID YOU DELIBERATELY USE INHALANTS?		
None	14886	94.5
1-3 days	454	2.9
4-7 days	143	.9
8-12 days	84	.5
13-20 days	60	.4
21-29 days	71	.4
Every day	58	.4

	<u>FREQUENCY</u>	<u>PERCENT</u>
38. IF YOU HAVE EVER USED A HALLUCINOGEN SUCH AS LSD, PCP, OR PEYOTE, WHEN WAS THE LAST TIME?		
Never	14807	94.0
More than 12 months ago	218	1.4
1-12 months ago	349	2.2
Within the last 30 days	380	2.4
39. ON HOW MANY OF THE LAST 30 DAYS DID YOU USE A HALLUCINOGEN SUCH AS LSD, PCP, OR PEYOTE?		
None	15204	96.5
1-3 days	282	1.8
4-7 days	89	.6
8-12 days	48	.3
13-20 days	44	.3
21-29 days	31	.2
Every day	53	.3
40. HAVE YOU EVER GONE TO A DRUG TREATMENT CENTER, CLINIC, MEDICAL DOCTOR, CRISIS CENTER, OR COUNSELOR TO RECEIVE HELP FOR A DRUG PROBLEM?		
Never	15484	98.5
More than 12 months ago	107	.7
1-12 months ago	79	.5
Within the last 30 days	57	.4
41. IF YOU WANTED TO GET SOME ALCOHOL, HOW EASY WOULD IT BE FOR YOU TO GET SOME?		
Very difficult	5190	33.5
Somewhat difficult	1766	11.4
Somewhat easy	3332	21.5
Very easy	5214	33.6
42. IF YOU WANTED TO GET AN ILLEGAL DRUG SUCH AS MARIJUANA OR COCAINE, HOW EASY WOULD IT BE FOR YOU TO GET SOME?		
Very difficult	7289	47.3
Somewhat difficult	2324	15.1
Somewhat easy	3069	19.9
Very easy	2727	17.7

	<u>FREQUENCY</u>	<u>PERCENT</u>
43. HOW MUCH SCHOOLING DID YOUR MOTHER COMPLETE?		
Grade school or less	309	2.1
Some high school	721	5.0
Completed high school	3613	24.9
Some college	4051	27.9
Completed college	3951	27.2
Graduate or professional school after college	715	8.0
I don't know or does not apply	1442	4.9
44. HOW MUCH SCHOOLING DID YOUR FATHER COMPLETE?		
Grade school or less	253	1.7
Some high school	604	3.8
Completed high school	2626	18.1
Some college	2718	18.7
Completed college	4485	30.9
Graduate or professional school after college	2774	19.1
I don't know or does not apply	1049	7.2
45. HOW OFTEN DO YOU ATTEND RELIGIOUS SERVICES AT A CHURCH OR SYNAGOGUE?		
Never	1184	10.0
Rarely	1593	13.5
Once or twice a month	1138	9.6
About once a week or more	7922	66.9
46. HOW IMPORTANT IS RELIGION IN YOUR LIFE?		
Not important	1841	12.7
Somewhat important	2354	14.7
Pretty important	2963	18.6
Very important	7368	50.7
47. DO ANY OF YOUR BROTHERS OR SISTERS DRINK ALCOHOL?		
No	10512	72.4
Yes	3697	25.5
I have no brothers or sisters	312	2.2
48. DO ANY OF YOUR BROTHERS OR SISTERS SMOKE CIGARETTES?		
No	11353	78.2
Yes	2882	19.8
I have no brothers or sisters	286	2.0

	<u>FREQUENCY</u>	<u>PERCENT</u>
49. DOES YOUR MOTHER OR FATHER SMOKE CIGARETTES?		
No	9883	83.4
Yes	1970	16.6
50. DOES YOUR MOTHER OR FATHER DRINK ALCOHOL?		
No	9179	77.6
Yes	2649	22.4
51. HAVE ANY OF YOUR BROTHERS OR SISTERS SMOKED MARIJUANA OR TAKEN OTHER ILLEGAL DRUGS?		
No	11499	79.6
Yes	2660	18.4
I have no brothers or sisters	292	2.0
52. DO YOU THINK A PERSON IN YOUR FAMILY MIGHT HAVE A PROBLEM WITH ALCOHOL?		
No	12210	84.2
Yes, a moderate problem	1637	11.3
Yes, a big problem	656	4.5
53. DO YOU THINK A PERSON IN YOUR FAMILY MIGHT HAVE A PROBLEM WITH DRUG USE?		
No	13096	90.3
Yes, a moderate problem	968	6.7
Yes, a big problem	440	3.0
54. DO YOU TRY HARD TO DO GOOD WORK IN SCHOOL?		
NO, not at all	316	2.0
No, not usually	1069	6.9
Yes, usually	6604	42.5
YES, almost always	7555	48.6
55. IS IT IMPORTANT TO YOU TO GET GOOD GRADES?		
NO, not at all important	295	1.9
No, not very important	494	3.2
Yes, somewhat important	4843	31.1
YES, very important	9919	63.8
56. DO YOU WANT TO GO TO COLLEGE?		
NO, definitely not	394	2.5
No, probably not	782	5.0
Yes, probably	366	22.0
YES, definitely	10695	68.8

	<u>FREQUENCY</u>	<u>PERCENT</u>
57. ARE YOUR SCHOOL GRADES BETTER THAN THE GRADES OF MOST STUDENTS IN YOUR CLASSES?		
NO, they are much worse	802	5.2
No, they are a little worse	3395	22.0
Yes, they are a little better	8239	53.5
YES, they are much better	2969	19.3
58. HAVE YOU CHANGED SCHOOLS DURING THE PAST YEAR?		
No	12849	83.0
Yes	2626	17.0
59. HAVE YOU CHANGED HOMES IN THE PAST YEAR?		
No	12762	82.4
Yes	2721	17.6
60. IN THE PAST YEAR DID YOUR PARENTS GET DIVORCED OR SEPARATED?		
No	11100	93.9
Yes	717	6.1
61. IN THE PAST YEAR DID A NEW ADULT START LIVING WITH YOUR FAMILY?		
No	10350	88.4
Yes	1358	11.6
62. IS THERE A LOT OF FIGHTING IN YOUR FAMILY?		
NO!	3276	88.4
No	5245	44.6
Yes	2413	20.5
YES!	834	7.1
63. DO PEOPLE IN YOUR FAMILY SOMETIMES GET SO ANGRY THAT THEY THROW THINGS?		
NO!	5581	47.5
No	2985	25.4
Yes	2401	20.4
YES!	783	6.7
64. DO PEOPLE IN YOUR FAMILY SOMETIMES HIT EACH OTHER WHEN THEY ARE MAD?		
NO!	5106	43.6
No	2813	24.0
Yes	2970	25.3
YES!	830	7.1

	<u>FREQUENCY</u>	<u>PERCENT</u>
65. DO YOU FEEL VERY CLOSE TO YOUR MOTHER?		
NO!	717	6.1
No	1135	9.7
Yes	3420	29.2
YES!	6428	54.9
66. DO YOU ENJOY SPENDING TIME WITH YOUR MOTHER?		
NO!	638	4.5
No	1130	7.9
Yes	5416	37.8
YES!	7156	49.9
67. DO YOU SHARE YOUR THOUGHTS AND FEELINGS WITH YOUR MOTHER?		
NO!	1565	10.9
No	3177	22.2
Yes	5585	39.0
YES!	4012	28.0
68. WOULD YOU LIKE TO BE THE KIND OF PERSON YOUR MOTHER IS?		
NO!	1674	11.7
No	2840	19.9
Yes	4976	34.9
YES!	4782	33.5
69. DO YOU FEEL VERY CLOSE TO YOUR FATHER?		
NO!	1227	10.5
No	1908	16.4
Yes	3797	32.6
YES!	4710	40.5
70. DO YOU ENJOY SPENDING TIME WITH YOUR FATHER?		
NO!	1122	7.9
No	1435	10.1
Yes	5231	36.7
YES!	6447	45.3
71. DO YOU SHARE YOUR THOUGHTS AND FEELINGS WITH YOUR FATHER?		
NO!	2656	18.7
No	4445	31.2
Yes	4587	32.2
YES!	2538	17.8
72. WOULD YOU LIKE TO BE THE KIND OF PERSON YOUR FATHER IS?		
NO!	2137	15.1
No	2611	18.4
Yes	4699	33.2
YES!	4726	33.3

	<u>FREQUENCY</u>	<u>PERCENT</u>
73. IF YOU HAD A PERSONAL PROBLEM, COULD YOU ASK YOUR MOM OR DAD FOR HELP?		
NO!	1253	8.8
No	1806	12.7
Yes	4741	33.2
YES!	6474	45.4
74. DO YOUR PARENTS WANT YOU TO CALL IF YOU ARE GOING TO BE LATE GETTING HOME?		
NO!	485	3.4
No	604	4.2
Yes	2693	18.8
YES!	10518	73.6
75. WHEN YOU ARE NOT AT HOME, DOES ONE OF YOUR PARENTS USUALLY KNOW WHERE YOU ARE AND WHO YOU ARE WITH?		
NO!	622	4.4
No	1210	8.5
Yes	5010	35.1
YES!	7436	52.1
76. HOW MANY OF YOUR BEST FRIENDS DRINK BEER, WINE, OR LIQUOR REGULARLY?		
0	9480	62.0
1	1632	10.7
2	1075	7.0
3	722	4.7
4 OR MORE	2373	15.5
77. HOW MANY OF YOUR BEST FRIENDS USE TOBACCO REGULARLY?		
0	10894	71.4
1	1315	8.6
2	907	5.9
3	528	3.5
4 OR MORE	1622	10.6
78. HOW MANY OF YOUR BEST FRIENDS HAVE TRIED MARIJUANA?		
0	9980	65.5
1	1498	9.8
2	966	6.3
3	667	4.4
4 OR MORE	2123	13.9

	<u>FREQUENCY</u>	<u>PERCENT</u>
79. HOW MANY OF YOUR BEST FRIENDS HAVE USED OTHER ILLEGAL DRUGS?		
0	10645	69.9
1	1545	10.2
2	957	6.3
3	613	4.0
4 OR MORE	1458	9.6
80. WOULD YOU LIKE TO MOVE OUT OF YOUR NEIGHBORHOOD?		
NO!	6903	45.8
no	3916	26.0
yes	2228	14.8
YES!	2023	13.4
81. IF YOU HAD TO MOVE, WOULD YOU MISS THE NEIGHBORHOOD YOU NOW LIVE IN?		
NO!	2125	14.0
no	2289	15.1
yes	4747	31.3
YES!	6015	39.6
82. DOES YOUR NEIGHBORHOOD HAVE CRIME OR DRUG SELLING?		
NO!	8183	54.0
no	3960	26.1
yes	2104	13.9
YES!	898	5.9
83. DO YOU THINK IT IS OKAY TO CHEAT IN SCHOOL IN ORDER TO PASS A DIFFICULT TEST?		
NO!	7113	46.9
no	4910	32.3
yes	2284	15.0
YES!	873	5.8
84. IF YOU DON'T GET CAUGHT, DO YOU THINK IT IS OKAY TO TAKE SOMETHING FROM A STORE?		
NO!	10791	71.1
no	2912	19.2
yes	952	6.3
YES!	529	3.5
85. IS IT IMPORTANT TO BE HONEST WITH YOUR PARENTS, EVEN IF THEY BECOME UPSET AND PUNISH YOU.		
NO!	1568	10.4
no	1700	11.2
yes	4796	31.7
YES!	7067	46.7

	<u>FREQUENCY</u>	<u>PERCENT</u>
86. DO YOU THINK IT HURTS SOMEONE TO SMOKE ONE OR MORE PACKS OF CIGARETTES PER DAY?		
NO!	862	5.7
no	413	2.7
yes	1695	11.2
YES!	12162	80.4
87. DO YOU THINK IT HURTS SOMEONE TO HAVE ONE OR TWO DRINKS OF ALCOHOL NEARLY EVERY DAY?		
NO!	972	6.4
no	1086	7.2
yes	2557	16.9
YES!	10504	69.5
88. DO YOU THINK IT HURTS SOMEONE TO SMOKE MARIJUANA REGULARLY?		
NO!	1007	6.7
no	629	4.2
yes	1405	9.3
YES!	12081	79.9
89. WHAT WAS YOUR AGE WHEN YOU FIRST SMOKED A CIGARETTE?		
NEVER TRIED	10363	68.8
12 OR YOUNGER	2481	16.5
13	871	5.8
14	550	3.7
15	400	2.7
16	257	1.7
17 OR OLDER	148	1.0
90. WHAT WAS YOUR AGE WHEN YOU FIRST DRANK BEER, WINE, OR LIQUOR -- MORE THAN A FEW SIPS?		
NEVER TRIED	9554	63.4
12 OR YOUNGER	2271	15.1
13	1207	8.0
14	763	5.1
15	667	4.4
16	385	2.6
17 OR OLDER	218	1.4
91. WHAT WAS YOUR AGE WHEN YOU FIRST TRIED MARIJUANA?		
NEVER TRIED	12809	84.9
12 OR YOUNGER	479	3.2
13	493	3.3
14	397	2.6
15	413	2.7
16	293	1.9
17 OR OLDER	201	1.3

	<u>FREQUENCY</u>	<u>PERCENT</u>
92. WHAT WAS YOUR AGE WHEN YOU FIRST TRIED AMPHETAMINES?		
NEVER TRIED	13878	92.1
12 OR YOUNGER	311	2.1
13	265	1.8
14	219	1.5
15	201	1.3
16	121	.8
17 OR OLDER	69	.5
93. WHAT WAS YOUR AGE WHEN YOU FIRST TRIED COCAINE?		
NEVER TRIED	14461	96.0
12 OR YOUNGER	190	1.3
13	145	1.0
14	86	.6
15	72	.5
16	57	.4
17 OR OLDER	51	.3
94. IF YOU USE ALCOHOL OR OTHER DRUGS, HAS YOUR USE CAUSED YOU A PROBLEM WITH YOUR SCHOOL GRADES?		
I DO NOT USE ALCOHOL OR DRUGS	11579	77.1
NO!	2152	14.3
no	750	5.0
yes	389	2.6
YES!	152	1.0
95. IF YOU USE ALCOHOL OR OTHER DRUGS, HAS YOUR USE CAUSED YOU A PROBLEM WITH YOUR RELATIONSHIP WITH YOUR FRIENDS?		
I DO NOT USE ALCOHOL OR DRUGS	11565	77.1
NO!	2183	14.5
no	729	4.9
yes	342	2.3
YES!	185	1.2
96. IF YOU USE ALCOHOL OR OTHER DRUGS, HAS YOUR USE CAUSED YOU A PROBLEM WITH YOUR RELATIONSHIP WITH YOUR PARENTS?		
I DO NOT USE ALCOHOL OR DRUGS	11502	76.6
NO!	1891	12.6
no	777	5.2
yes	523	3.5
YES!	318	2.1

	<u>FREQUENCY</u>	<u>PERCENT</u>
97. IF YOU USE ALCOHOL OR OTHER DRUGS, HAS YOUR USE CAUSED YOU A PROBLEM WITH THE POLICE?		
I DO NOT USE ALCOHOL OR DRUGS	11663	78.1
NO!	2066	13.8
no	495	3.3
yes	369	2.5
YES!	331	2.2